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PRINCIPLES

OF

POLITICAL ECONOMY.

BY

CHARLES GIDE,

PROFESSOR OF POLITICAL ECONOMY IN THE UNIVERSITY OF MONTPELLIER, FRANCE.

TRANSLATED BY

EDWARD PERCY JACOBSEN

(FORMERLY OF UNIVERSITY COLLEGE, LONDON).

With an Introduction and Notes

BY JAMES BONAR, M.A., LL.D.

BOSTON, U.S.A.:

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INTRODUCTION.

AMERICAN and English readers will welcome the translation of Professor Gide's book. It is neither a primer for beginners, nor a dissertation for the learned, but a guide-book for serious students who have mastered the economical alphabet, and are feeling their way to a judgment of their own on economical subjects. Its place in French economic literature is almost unique. It is helping many a young Frenchman to turn his attention to economic theory, and to study it in the light of the latest discussions. Professor Gide has Adam Smith's faculty of making his readers think for themselves, and accept no conclusion without following out the process that leads to it. He lays a just emphasis on the need of impartiality and freedom from prejudice. In a book written for real students of a subject, the truth should be told without reserve or fear of consequences.

Economists familiar with recent investigations (Continental, American, and English) of the doctrines of Value, Wages, Foreign Trade, etc., will not always agree with the views presented in this volume. Students will do well to supplement its somewhat scanty references to current economic literature by such a bibliography as that which is given by Professor E. B. Andrews in his *Institutes of Economics* (Boston, 1889).

It will be observed that the schools of modern economists are (in the beginning of the book) so classified that our author re-

mains outside of them. His position, however, is substantially that of the First or "Classical School," if we substitute evolution and social union ("solidarity") for finality and individualism. Like the Classical School, he recognizes the need of Theory and (to that end) of Abstraction; and the theoretical work of the Classical School is in great part the foundation of his own new building.

Political Economy in the hands of Professor Gide is neither dismal in its conclusions, nor dull in its deliberations. Though these may be counted adventitious attractions, they will be keenly appreciated by most of his readers. In point of style, our author has few rivals, even in France.

JAMES BONAR.

HAMPSTEAD, LONDON,
14th March, 1891.

AUTHOR'S PREFACE TO THE THIRD [FRENCH] EDITION.

When the first edition of this work appeared in 1883, I refrained from prefixing any prefatory note, for I thought it wiser for the book to introduce itself to the public. In the second edition I somewhat sharply replied to some severe criticisms which had been directed against the tendency of the treatise. In the preface to this new edition complaints are out of the question; all that I can do is to thank the public for the favorable manner in which the book has been received both in France and abroad.

I have endeavored to acknowledge this kind reception by correcting and supplementing, to the best of my powers, the weak points and deficiencies which have been brought before my notice. However, there is a criticism of a general nature which has reached me from various quarters and has proceeded from friends as well as from adversaries; to this I must devote a few words of explanation unless I wish to incur the charge of neglecting it. The complaint is, that in treating each question I have set forth the various competing systems without expressing my own opinions in a sufficiently decided manner; I am, therefore, charged with leaving students to wander in a state of unpleasant uncertainty, and with consequently failing to discharge in full measure the duties of a professor who is entrusted with the care of the minds of the young.

My reply is, that this book is not intended for scholars in primary schools or for use in secondary education. Nor is it addressed exclusively to students of the universities; its object is also to reach practical men who wish to form for themselves an opinion on economic and social questions; I repeat, men who wish to

form an opinion "for themselves," and are not content with receiving one ready-made from the teacher's lips. My method may sometimes leave the reader in a state of hesitation and suspended, as it were, in a species of mental balancing which is wont to lull to sleep minds of a sluggish nature; but I am confident that it will be profitable to those who are eager for the discovery of truth and do not wish to have opinions forced upon them. Further, I have not shrunk from pronouncing an outspoken judgment on all questions in which the truth seems to be beyond controversy; in all cases in which doubt is possible, — a class of questions which unfortunately is far more extensive, — I have striven to maintain an equal balance, but, nevertheless, have not neglected to throw in that grain of sand which, for the keen observer's eye, is enough to turn the scale.

Perhaps I may also be allowed to remark, that the excess of impartiality for which I am taken to task has not been the characteristic feature of treatises on political economy which have been hitherto published in France. For several generations these books had been in the habit of presenting political economy in only one light, — the point of view of the "Liberal" school. There is, then, no reason to murmur if later treatises should break with a tradition which was beginning to assume the shape of a law, should restore their rightful place to doctrines which have heretofore been proscribed, and should give their due share of justice even to notions which do not command our assent; for thus can be applied Shakespeare's admirable maxim, —

> "There is some soul of goodness in things evil,
> Would men observingly distil it out."
>
> — *Henry V*, act iv, scene 1.

CHARLES GIDE.

AMERICAN INTRODUCTION.

SCIENCE is international; it suffers when the natural relation between different countries is interrupted, and gains when the connection is resumed. The publication in America of a treatise on Economics written in France, and translated in England, means the re-establishment of an intellectual commerce that has been partly under an embargo. The orthodoxy of many French economists, and the impulse to enlist under new school or historical standards, which lately showed itself in America, had the effect of isolating these two countries from each other; while between the American school and the English school of a few years ago, a similar though less complete separation had taken place. Between England and America an active interchange of thought has since been established.

In addition to the benefit to be derived from a closer scientific relation to France, there are specific gains to be expected from the use of Professor Gide's treatise by American students. Its progressive spirit will make it everywhere welcome, and its appreciative attitude toward the older schools of thought will, at the same time, make it everywhere useful. It carefully retains the best fruits of early work; the "new departure" that it represents is one that does not break with the past. Its conspicuous quality is a wisdom that is not often combined with so much of brilliancy.

Mr. Jacobsen has been very successful in preserving in his translation the literary quality of the original work.

J. B. CLARK.

NORTHAMPTON, MASS.,
March 20, 1891.

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PRINCIPLES OF POLITICAL ECONOMY.

GENERAL NOTIONS.

I. THE OBJECT OF POLITICAL ECONOMY.

It may appear strange, at the beginning of a treatise on political economy which is perhaps the hundredth which has been written on the subject, to declare that a precise definition of political economy has still to be found.

Such, however, is the truth; and after all, there is nothing very surprising about it. No science can be clearly defined until it has been finished and till the neighboring sciences are so also. Now, such is not the case with the science which is occupying our attention; on the contrary, like the other social sciences, it is a science in process of formation. Just as in a still unexplored land, the traveller cannot mark out on the map the exact frontiers of each district, but must confine himself to indicating more or less approximately the great dividing lines which he perceives or guesses at, so here, too, we must be contented with pointing out as accurately as we can the domain of political economy, without venturing to mark it off very clearly from the territory of the other social sciences.

Without, then, seeking at present a precision that would be useless, we may say, in harmony with most writers, that political economy is the science of wealth. Although the word "wealth" of itself greatly needs definition, yet it sharply suggests to the mind the essential facts with which our science deals, and there-

fore frees us from a recourse to long circumlocutions ; still we must not be led astray by the circumstance that political economy deals with wealth, that is to say, with things, *res*, nor be tempted thereby to class it among the natural sciences which study bodies. Wealth, as we shall see, is created by the needs of men living in society, and consequently the study of wealth is nothing but the study of "man" under one of his most characteristic aspects.

Three questions have always occupied the thoughts of men: "How can wealth be produced?" "What use should be made of it?" "In what manner should it be divided?" The several answers to each of these questions constitute one of the great divisions of political economy ; viz., *production*, *consumption*, and *distribution*. In works on political economy, almost without exception, a fourth division is added, viz., *circulation ;* but we must confess that we have never been able to understand what the term answered and referred to. For the circulation of wealth, *i.e.* the transferring of commodities from hand to hand, is, as will be seen, nothing but a consequence and a form of division of labor. It is therefore irrational to detach this section from the department of production in order to make it into a distinct branch. The fact that wealth may be transferred from hand to hand is a circumstance which is valueless in itself, and its only worth lies in the measure in which it contributes to social production.

It is clear that the three questions which constitute the pith of political economy are essentially practical ones, and it seems to follow that the science whose object it is to supply an answer to these questions should itself be of a practical nature ; in other words, be an *art* rather than a *science*. Indeed, it was under this aspect as an art, or say a practical study pursuing a definite aim, namely, national prosperity, that political economy was always regarded by the ancients. This, too, is shown by the etymology of the word (οἶκος = the house, νόμος = government, πόλις = the city), and Adam Smith, the father of the science, adhered to this definition.

But the human mind, which is always curious to learn the

reason of things, has gone on to ask a further question: "What is Wealth?" But this differs from the three earlier questions by possessing a purely speculative character; its object is to determine the causes which render wealth desirable, to discover the necessary relations between different kinds of wealth; in other words, to formulate the laws of value and of price. To the answering of this branch of questions we purpose to devote a fourth division; but to comply with the necessities of logic this must be our first part, and should be regarded as the purely theoretical side of political economy.

In most works on political economy, value is merely dealt with as a portion of exchange, but that presents it in a far too narrow light. The notion of value is really the basis of all political economy; and not only exchange, but distribution, consumption, and production likewise become united, from a strictly scientific as well as from a practical point of view, when questions of value are discussed. It is logical, then, to give value a branch to itself, unless, indeed, we are willing to scatter it through all the other divisions. In fine, works on pure political economy are in reality nothing but treatises on value.

Political economy is not the only science which treats of the relations between men and things or of the relations of men *inter se*; *Law* and *Morals* share in this study. These three great social sciences have the same object, at least for a part of their work; though, no doubt, they view it under three different aspects. The economist is concerned merely with the *wants* of men, the lawyer with his *rights*, the moralist with his *duties*. But on questions of succession, property, credit, on the contract of loans and of wages, the lawyer and the economist are compelled to join hands, just as the economist and the moralist have to meet on the questions of luxury or poverty and many others. This is a happy meeting and is of great benefit to all three sciences. Our virtual separation of them follows less from the necessities of logic than from that weakness of human understanding which debars us from comprehending so vast a domain at one and the same

glance. Still it is to be hoped that there may be a daily increase in their blending and joint study.

Years ago Auguste Comte laid down "that every study isolated from its various social elements was, from the very nature of the science, compelled to be essentially sterile, *after the example of political economy*." For he conceived the idea, which constitutes his chief title to fame, of the regulation of all social phenomena by a separate science which he called *sociology*. All workers at sociology, whether they be of the school of Comte or of the school of Herbert Spencer, apply their main efforts to the formation of a huge synthesis of all the social sciences; but the field is so vast that it is easy to miss the right road.

II. ON METHOD IN POLITICAL ECONOMY.

In scientific language the term "method" is used to mean the road that must be followed for the discovery of truth. Now there are several roads, and the question as to which road should be chosen has in recent years aroused a great controversy.

The classical school of economics, of which Ricardo is the most illustrious representative, used to employ the *deductive* method,—a method which starts from certain general principles that are regarded as indisputable, and proceeds thence by way of logical consequence to deduce an indefinite series of propositions. Geometry (or even theology) may be taken as the type of the sciences that employ the deductive method. Law students will readily recognize that Law itself, particularly Roman Law, employs the deductive method; for the jurisconsult, starting from a few principles laid down by the Twelve Tables, or found in the *jus gentium*, proceeded to construct that huge monument of learning that we call the Pandects. In economic science the deductive school started from the principle (named hedonistic) "that man always desires to obtain the maximum of satisfaction with the minimum of pain," and thence deduced a series of propositions which still constitute the framework of economic science.

The new school rejects this mode of reasoning; it asserts that in social science, and in the physical or natural sciences likewise, the *inductive method* is the only one to employ: this method starts from the observation of certain particular facts in order to rise to the height of general propositions; for example, from the fact that all bodies fall, to the law of gravity. In economics this method will be shown in the individual and accumulated observation of all social facts as they are revealed to us, in their present state by means of statistics or by information supplied by travellers, in their past state by history. Thus we shall be able to slowly raise the edifice of economic science, which will then be the true science, not like that artificial science (so says the new school) which the deductive school constructed in cut and dried fashion.

Both of these methods are too absolute; but truth is never reached by so perfectly straight a road. The real method of political economy proceeds by three stages:

First. By the *observation* of facts without any preconceived notion, even those which at first sight appear to be the most trivial.

Second. By the *imagination* of a general explanation which will enable us to establish mutual relations between certain groups of facts; *i.e.* by the forming of an *hypothesis*.

Third. By the *verification* of the validity of this hypothesis, by seeking, by the aid of experiment if possible, at any rate by specially directed observations, to discover whether it exactly corresponds with the facts. . . . Of course it is not necessary for the same men of science to make observations, form hypotheses, and verify them; for the gifts of observation and of imagination are somewhat rarely combined in the same person.

The above has been the procedure adopted in all sciences. All those great laws which constitute the bases of modern sciences, beginning with Newton's Law of Gravity, are only verified hypotheses; and we must add that the great theories which are the groundwork of scientific research, *e.g.* the existence of ether in physics, or the theory of evolution in natural science, are merely *hypotheses which require verification*. Proof of this may be found

in Claude Bernard's *Introduction à l'Étude de la Médecine Experimentale* and in M. Naville's *La Logique de l'Hypothèse.*

As Stanley Jevons has observed in his *Principles of Science*, the method employed for obtaining the discovery of truth in the sciences is similar to that unconsciously made use of by those who try to find the meaning of those rebuses or ciphers to be met with on the back page of some illustrated papers. In order to *guess* what the meaning of this enigma may be, we imagine some meaning or other. Then we observe whether this really agrees with the figures or images before us; if it does not, it is an hypothesis to be rejected. We then conceive another one, and so forth, until we obtain a more successful result, or lose courage altogether. We shall find nothing in facts unless we have previously in our minds an image or a forecast of the truth.

The new school, then, is wholly in the right when it blames the classical school for its dogmatic attitude and for its tendency to believe that the principles, at which it has arrived by reasoning, are the exact expression of what is and of what ought to be. But this school, in its turn, commits no less serious an error in believing that the attentive observation of facts is of itself sufficient to establish the science of economics, and that we may therefore for the future dispense with any resort to abstraction, hypothesis, and the "let us suppose" so dear to the school of Ricardo and so obnoxious to the school now under mention.

The facts presented to us by nature are too numerous, too complex, too interlaced; and in economics especially, they form too inextricable a labyrinth for us ever to be able to discover our whereabouts, unless reason or imagination comes to our aid and throws light upon the darkness and forms order out of the chaos. It is true enough that the generalizations of the classical school to which, too ambitiously, perhaps, has been given the name of "laws" (for instance, those associated with Ricardo and with Malthus), are for the most part only hypotheses to be verified or to be rejected. But, such as they are, they have rendered eminent service to the science of economics, and it would be ungrateful

to disown them, even though they may come to be regarded not as the framework of political economy, but only as the scaffolding used during the construction of buildings, and destined to be taken down as soon as the work is completed.

Latterly, however, a new deductive school has arisen, which, in spite of adhering faithfully to the reasoning method, and even pushing it to the extreme, as is shown by its preferring to employ mathematical language, has been wary enough not to be ensnared by its own speculations, as was the case with the former deductive school. This newer deductive school presents its abstractions purely as what they are; that is to say, as hypotheses intended to illuminate facts and guide observation.

In his *Elements d'Economie politique pure*, M. Walras of Lausanne writes: "Pure political economy is essentially the theory of the determination of prices under a *hypothetical* regulation of absolutely free competition." To this may be added a dictum of Signor Pantaleoni in his *Principii di Economia pura*: "Whether the hedonistic and psychological hypothesis (that of the maximum of pleasure with the minimum of effort), whence all economic truths are deduced, coincides or fails to coincide with the motives which actually determine men's actions, is a question which in nowise detracts from the accuracy of truths deduced therefrom."

In point of method there is one great difference between the economic and the natural sciences; in economics it is very difficult and often impossible to employ *experiment*, and therefore hypotheses may remain in suspense for an indefinitely long period, for want of any suitable means of verification. The chemist, the physicist, and even the biologist, though the last experiences greater difficulties, can always place the fact which they wish to study under certain artificially determined conditions which they can vary at will.

For instance, in order to study the respiration of an animal, they can place it under the bell-jar of a pneumatic machine, and alter the pressure of the air according to their requirements. This power is never possible to the economist, even though he be

joined by a lawgiver or an omnipotent despot. In social matters we are obliged to study facts as they are presented to us, without being able to isolate them from the web of connected facts in which they are implicated. We cannot put a country under a bell-jar; and even if we could, that would not be enough to enable us to draw any certain conclusions.

Let us suppose that in order to study the effects produced by free trade, we could take two countries, and subject one to an absolute *régime* of free trade, the other to a protectionist system; and find, at the end of ten years, that the former had greatly increased in wealth, whereas the latter had become ruined. No doubt this would be valuable information for us to gain; but still, even under the extraordinarily favorable, and moreover, altogether imaginary, circumstances that I have supposed, the experiment would not be a decisive one. For the various destinies of different countries can be explained by far other causes than differences in their commercial systems; to wit: differences in environment, in race, in legislation, in individual energy.

Take the two Australian colonies of New South Wales and of Victoria; though both of them are of the same race and in the same environment, the first is free-trading, the second is protectionist. Although this experiment has already lasted for a long time, are we to think that the question of free trade has yet been solved? By no means! *Adhuc sub judice lis est.*

Instead, therefore, of being able to make direct social experiments, we are obliged to wait for what chance may supply us with in certain particular circumstances, such as the application of a new method of legislation, the foundation of a socialist community, a pathological crisis in an existing society; and even then this indirect mode of experimentation would but very rarely lead us to any definite conclusions.

We must not then be astonished, as people too often are, if the science of economics takes far longer to construct than was the case with the physical or natural sciences. Nay! the reverse rather would have caused surprise; for on the one hand the

observation of facts is in this study more difficult than it is elsewhere; and, on the other hand, the most powerful means for reading between the lines of facts (the auxiliary that has enabled the other sciences to make such marvellous and so rapid progress), I mean experiment, now deserts us. A further reason this, for not absolutely rejecting the employment of the abstract method.

In truth, the observation of economic and social facts is a task which is infinitely above all individual effort. It could only be the collective work of thousands of men putting their observations together, or of governments themselves, using for this purpose the powerful means of investigation which they have at their disposal. If there is one simple and elementary fact among all the facts which have any connection with the social sciences, it is surely that of the number of persons composing a society. Yet it is clear that an isolated observer is absolutely powerless to determine this matter. Governments alone can undertake this task, and even then it is only quite recently that official returns have attained a moderate degree of accuracy.

To take another example. In 1879 the French National Society of Agriculture wished to make an inquiry into the question whether the division of property had increased or diminished. Can a simpler question be imagined? Yet the result of this inquiry (as reported by M. Leroy-Beaulieu in his book on *La Répartition des richesses*) was that out of 88 correspondents, 38 replied that the division of property had increased, 4 that it had diminished, 21 that it had remained unchanged, and 25 made no reply at all, probably because they knew nothing at all about it.

III. WHETHER THERE ARE NATURAL LAWS IN POLITICAL ECONOMY.

When we grant to any branch of human knowledge the name of *science*, our object is not the simple bestowal on it of an honorary title; the assertion we make is, that the facts studied by this

"science" are naturally connected with one another in a regular order; in other words, that they are subject to *laws*.

In some domains the order of phenomena is so obvious that such a state of things has compelled remark even from the minds which are least accustomed to scientific speculations. A mere lifting of the eyes skywards is enough to establish the regularity of the nightly progress of the stars, of the monthly succession of the phases of the moon, of the yearly journey of the sun through the constellations. In the most remote days of history, shepherds watching their flocks, sailors steering their vessels, had already recognized the periodical nature of these movements, and herein were laid the foundations of a true science, the oldest of all sciences, — astronomy.

The phenomena which are manifested in the constitution of organized bodies and dead matter are not as simple, and the order of their co-existence or succession is not as easy to comprehend. Many centuries, therefore, had to elapse before the human mind, lost in the labyrinth of things, succeeded in laying hold of the guiding thread, in finding at length order and law in these facts themselves, and in forming out of them the sciences of physics, chemistry, and biology.

Little by little this idea of a constant order among phenomena has penetrated into all domains, even into those which at first sight seemed destined to remain forever closed to it. Even those winds and waves, which poets had from time immemorial made the emblem of inconstancy and caprice, have in their turn come to recognize the empire of this new power. At least the great laws have been established, which direct, through the atmosphere or across the oceans, the aërial or the maritime currents. And meteorology, or the physics of the globe, has in its turn established its foundations. Even the chances of wagers, the combinations of dice — there is none, even of these, which has not been subjected to the calculation of probabilities. Hazard, even, henceforward has its laws.

The day, too, was to come when this grand idea of a natural

order in things, after having step by step, in the guise of a conquering power, invaded all the domains of human knowledge, would at length penetrate the region of social facts. To the French school of Physiocrats falls the distinction of having first recognized and proclaimed the existence of this natural government of things; thence, in truth, is derived the name of their school, from two Greek words which mean "government of nature." For this reason they might be said to have earned the title of founders of economic science, had they not been too greatly eclipsed by the glory of Adam Smith. "Human society," said Quesnay, "is a necessary fact, governed by providential laws. The mission of government is not to make laws, but to declare and proclaim natural laws, and make their observance sure."

In the present century, especially, following in the wake of Auguste Comte and Herbert Spencer, nearly all the great schools, positivist, evolutionist, historical, even socialistic, have teemed with opinions of this character; all of them, in greater or less degree, regard human societies as organisms, which are born and developed according to laws precisely analogous with those biological laws which govern the evolution of all living creatures. Still, it cannot yet be said that this notion of natural laws in economics is unanimously accepted. It conflicts, in fact, with no small difficulty; economic facts are human acts, and therefore voluntary acts, and as being such can scarcely be conceived as falling under the rule of inevitable laws. However, there is no insurmountable contradiction in the case.

If an inevitable contradiction is customarily found (or supposed) to exist between the idea of liberty and the idea of natural law, that arises from our not understanding the latter expression in its real sense: natural law is represented under the shape of civil law or penal law; that is to say, as a power holding a sword in its hand, which insists on being obeyed, willy nilly. Nothing could be more false than this conception. Natural law is only the expression of a constant relation which has been established between certain phenomena, and in economics it is nothing but

the expression of certain constant relations in the acts and proceedings of men.

Now statistics have frequently shown the really surprising regularity in the recurrence of the most important acts of human life, such as marriage; or of the most trivial, such as posting a letter without having addressed it. In economic facts, properly so called, this regularity is no less remarkable. The current of a river, which is usually determined by natural laws, is neither more constant nor more regular than the movement of a great commercial current, such as that of a railway line, and the variations of traffic of the latter are surely easier to explain and to forecast than the changes of level of the former.

For an explanation of this regularity which is so strange at first sight, it would be sufficient, to begin with, to consider how important a part is played in social facts by the involuntary and the unwitting; for instance, the influence, or rather the tyranny, exercised over our daily conduct by *habit*, *imitation*, and *heredity*, — those three factors which have the common attribute of being absolutely independent of our will (see M. Tarde's very interesting book *Les lois de l'imitation*).

But, in truth, it is not even necessary for an explanation of this phenomenon to restrict the field of human liberty. The regularity of economic and social facts is not opposed to liberty; on the contrary, it is the consequence of this liberty when enlightened and deliberate. Imagine a world in which all men were absolutely free, absolutely wise; the march of events therein would be certainly far more regular even than it is with us. If, on the other hand, all men were mad, then, but then only, would disorder and chaos be the law of this world, and economic facts would be beyond the pale of all rational prediction.

Kant, the metaphysician of free will, fully admits, however, the existence of natural laws in the social sciences. "In whatever way free will may be represented in metaphysics, its manifestations are in human actions determined, like every other phenomenon, by general laws of nature. History, which deals with the recital

of these manifestations, however deeply their causes be hidden, does not abandon one hope ; viz., that in observing the play of free will on a large scale it may discover therein a *regular* movement. . . . Thus marriages, births, and deaths do not seem to be subject to any rule which would admit of the calculation of their number beforehand ; yet the yearly tables drawn up in some great countries testify that in this matter as close obedience is paid to constant laws as is paid by the variations in the atmosphere, the growth of plants, the course of rivers, and the remainder of the economy of nature. Individuals, nay, whole peoples, do not in the least imagine that though following each of them their own bent and often engaging in strife with one another, they are still unconsciously obeying, just as the bees and the beavers, the design of nature which is unknown to them, and are contributing to an evolution, which, even could they be aware of it, would be of little matter to them." — KANT, *Idea of an Universal History. Edition Hartenstein,* IV, 143.

Prediction, in fact, is the criterion by which we recognize the existence of natural laws, and consequently, too, the character of a true science. If, indeed, facts are linked together in a certain order, like a well-managed procession in which each member keeps its place and observes its distances, if there is, to use a current phrase, a "march" of events, it should always be possible, *one fact* being given, to foresee what should follow or accompany it. In some sciences, on account of their simplicity, this power of prediction is so extensively exercised that it stupefies the vulgar and assumes the shape of actual prophecy ; for instance, the predictions of astronomy. In the physical and natural sciences prediction rarely cleaves the future, but yet in more modest measure it enables the chemist, combining two substances in a crucible, to say what body will result from this combination and what its properties will be ; and by its aid the geologist can state the various strata that will be met with in the piercing of a tunnel or the sinking of a mine-shaft. The naturalist who sees for the first time an unknown animal, even before dissecting, can tell in

advance, from certain external signs, what organs will meet his scalpel, and their order of presentation. Is the economist capable of availing himself of a similar faculty of prediction, thanks to his scientific pretensions?

He is, undoubtedly. Of two objects of the same quality but of unequal value, he can foretell that the buyer will choose the less dear; or if that instance be too trivial, he can nowadays, from various signs, such as the rate of exchange, which is neither more nor less certain than the warnings given to the sailor by the barometer, observe and foresee the approach of commercial crises. We shall have occasion to see other instances. If into any country an inferior money be introduced, say paper money, the speedy disappearance of the good money can be safely predicted (see *Gresham's Law*). By the simple sight of the rate of exchange one can judge of the financial and commercial condition of a country (see *Exchange*). Stanley Jevons has even essayed to prove that there is a ten-yearly cycle in commercial crises parallel to that shown by astronomical phenomena, to which his daring theory strove to relate them (see *Crises*).

We must point out that even those who are the most vehement in refusing to economists the possibility of prediction in economic questions, do not fail, however, to employ it themselves in their ordinary course of life and in the management of their daily business. The financier who buys a share in the Suez Canal or in a railway foresees the continuity and the progressive increase of a particular traffic in a fixed direction, and his purchase of the share at a high rate testifies, whether he will or no, to his firm confidence in the regularity of one economic law. Every one who speculates — and who is there who does not speculate? — resorts to prediction after his own fashion; this, no doubt, is too often exercised in a haphazard manner, but it might be used scientifically: taking it all in all, the speculator, as far as he is concerned, considers prediction to be perfectly rational.

True enough, in this sphere forecasts are, as is sometimes said, only approximate ones, and cannot be expected to reach any

mathematical precision. But it would be utterly absurd to conclude that, because exact prediction is not possible, therefore there are no laws at all! No one can hold that wind, rain, hail, or storms are the result of chance, much less of human will. They are certainly ruled by natural laws. Yet forecasts are no more exact in this branch than they are in economics, and a commercial crisis can be more safely predicted than can a cyclone.

If our predictions in political economy are always uncertain and do not look far in advance, the reason of this must be sought, not at all in the non-existence of economic laws or in a supposed want of order in events, but purely in our ignorance of causes, just as in meteorology. Whatever may be one's opinion as to free will, it is not doubtful, as John Stuart Mill says, "That given the motives which are present to an individual's mind, and likewise the character and disposition of the individual, — if we knew the person thoroughly and knew all the inducements which are acting upon him, — we could foretell his conduct and the manner in which he will act." — *Logic*, VI, ii, sect. 2, page 422.

Such motives will never be known to us exactly. Luckily, in the treatment of economic facts, we have not to forecast the conduct of any one individual considered by himself; *all that concerns us is the conduct of men viewed en masse;* we have only to deal with averages, and therefore have no need of that exactness which is indispensable to the astronomer or the physicist.

IV. THE FOUR ECONOMIC SCHOOLS.[1]

The science of Political Economy is divided into numerous schools (into almost as many as philosophy), which is an incontestable sign of inferiority. It is no real consolation to say that the science has existed for scarcely more than a century, and that age will remedy this defect. Other sciences which are no older,

[1] In an Address given at Geneva in March, 1890, our author classifies the schools as those of Liberty, Authority, Equality, and Solidarity, respectively; and he ranks himself with the last. — J. B.

some, indeed, which are younger, have already succeeded in developing a collection of principles sound enough to gain the unanimous adhesion of all their students. As this is not the case with economics, many keen intellects refuse to grant it the title of "science," or at any rate declare that such a title is a premature one. Yet it is well to remark that the various schools differ from one another far less about the explanation of economic phenomena than about the mode of studying them, the way of judging them, and the practical consequences that can be deduced. The possibility of a common understanding is not remote when the question is, for example, the discovery of the causes of the inequality of wealth; but when the subject for discussion is to determine whether this inequality of conditions is a good thing in itself, and especially whether any attempt at modification is necessary, then it is that divergences of opinion become marked. They arise, then, from the moral and political character of this science, and probably will never disappear, though there is reason to hope that on certain essential principles some agreement will be arrived at.

Section 1. The Liberal School.

The first of these schools is what is called *classical*, on account of its having appeared first, and having long reigned without a rival; or *liberal*, in virtue of the famous formula which is its motto. But is it really a school? Its partisans reply to such a question with some *hauteur*, and claim to represent the science itself; they assume, and for the most part receive, even from their opponents, the name of *economists*, and nothing more. The latter, however, sometimes term it, not without a touch of irony, the *orthodox*, or *individualist*, school. Its doctrine is very simple, and may be summed up as follows: —

Human societies are governed by natural laws which *we could not alter one jot, even if we wished*, since they are not of our making. Moreover, *we have not the least interest in modifying them, even if we could*; for they are good, or, at any rate, the best possible. ("The laws which govern capital, wages, and the dis-

tribution of wealth are as good as they are inevitable. They bring about the gradual elevation of the level of humanity." — LEROY-BEAULIEU, *Précis d'économie politique.*) The part of the economist is confined to discovering the action of these natural laws; and it is for men and governments to strive to regulate their conduct according to them.

These laws are in nowise opposed to human liberty; on the contrary, they are the expression of relations which are spontaneously established between men living in society, wherever these men are left to themselves, and are free to act according to their interests. Thus, between these individual interests which are apparently antagonistic a harmony is established, which exactly represents the natural order of things, and is far superior to any artificial combination which could be imagined.

The part of the legislator, if he wishes to insure social order and progress, is confined, then, to developing these individual initiatives as far as possible, to doing away with whatever might interfere with them, and to prevent individuals from harboring ill will, or being biassed one against the other. Therefore the intervention of the powers that be ought to be reduced to that minimum which is indispensable to the security of each and of all; in a word, to *laisser faire.* "We assert that these natural laws govern the production and distribution of wealth in the manner which is the most useful; *i.e.* the most conformable to the general good of the human species. Observation of them, together with the smoothing away of the natural obstacles which impede their action, and especially the prevention of any artificial obstacles, is sufficient to render the condition of man as good as is consistent with the state of advancement of his acquirements and his industries. Our gospel, therefore, is summed up in these four words, 'Laisser faire, laisser passer.'" — DE MOLINARI, *Les lois naturelles.*

The whole of Bastiat's famous work, the *Harmonies économiques,* is nothing but the development of these ideas.

This conception assuredly lacks neither simplicity nor grandeur. Whatever destiny be in store for it, it will at least have the merit

of having assisted to establish the science of political economy; and, if some day other doctrines take its place, it will none the less be the foundation upon which they are built.

The most serious complaint that can be made against this body of teaching is a very marked tendency to *optimism*, which appears to be inspired far less by a truly scientific spirit than by a desire to justify the existing order of things. Undoubtedly, from a consideration of the economic organization of a society and of the institutions which are its groundwork, the conclusion may be drawn that they are beneficial, at any rate in certain aspects; for the very fact of their existence and duration shows well enough that they have a value which is at least relative; further, that they are natural is a just conclusion to make, for they are evidently determined by the series of previous states which produced them. But in nowise can it be inferred that they are the best possible; that conclusion is altogether illogical. Auguste Comte, years ago, protested in the name of science against "this systematic tendency to optimism which is clearly theological in origin" (*Cours de philosophie positive*, 48e leçon).

But this doctrine cannot even offer the excuse that it agrees with theology, as Comte supposes; for Christian theology is less optimistic than anything else. On the contrary, in its eyes, the actual order of things and all the manifestations of human liberty are irretrievably vitiated by the Fall.

Nor is it any more legitimate to conclude that because natural laws are permanent and immutable, the existing economic facts and institutions should also possess this character of permanence and immutability. That, too, is a sophism, not to say word-jugglery. If, on the other hand, as contemporary science shows a tendency to believe, the natural law, *par excellence*, is that of evolution, then it would be necessary to say that natural laws, far from excluding the idea of change, always presuppose it. When the Socialists, for instance, maintain that the wages system is bound to disappear, because, just as it has succeeded to serfdom and slavery, so it too will be replaced in turn by co-operation or

some other at present not named state, their line of argument can no doubt be criticised; but it cannot be stigmatized as contradicting natural laws, since these very laws cause the same plant to produce in succession, first seed, then flower, then fruit.

Not only can economic facts and institutions suffer change, but also our will is by no means powerless in bringing about these alterations. Indeed, this will is every day and in the most efficacious manner exercised on physical facts for their modification according to our needs, and this reasoned human action on natural phenomena is not in the slightest incompatible with the idea of natural law; on the contrary, it is closely bound up with it. As M. Espinas wittily remarks in his *Sociétés animales*, "If human activity was incompatible with the order of things, the act of boiling an egg would have to be regarded as a miracle." If, in truth, the idea of law were non-existent, if there were no bond between phenomena, if a cause might produce a certain effect, or might not; in a word, if chance were the ruler of the world, man would be powerless to do aught, or to attain any end whatever; for while modifying such and such a fact he would never know what the result was to be, and his acts would be those of a blind man. Man erects lightning conductors to protect his buildings because he believes in a natural law, viz. that metallic points exert a certain influence on electricity; but, if electricity followed at random any track, it is clear that Franklin's invention would be useless.

Besides, the mere opening of the eyes enables us to perceive at once man's marvellous power of modifying natural phenomena. Some, no doubt, from their immensity or their distance, obtain immunity from all acts of ours, — say, astronomical, or geological, or even meteorological phenomena: then we have but to submit to them in silence, and our power of prediction does not enable us to escape from a shock from a comet or from an earthquake; but how many other domains are there in which our knowledge is almost supreme! Most of the compounds of inorganic chemistry (the most important ones, by the way) have been made by the

man of science in his laboratory. On seeing the cattle-breeder in his stalls, the horticulturist in his gardens, ceaselessly modifying animal or vegetable forms and creating new races, it seems as if animate Nature herself submitted to a process of kneading like inert matter. Even atmospheric phenomena do not entirely escape from the power of human industry; the latter, indeed, makes bold to assert that by fitting clearances, or by new plantations, it will modify the government of the winds and the waters, and, repeating the miracle of the prophet Elisha, will, whenever it wishes, bring down from heaven the rain and the dew.

In much greater measure, our activity can be exercised on economic facts, precisely because they are acts done by man, and we have immediate hold over them. Even the teachings of the determinist school, those who deny free will (and surely the liberal school are not among such) recognize that man has the power of modifying the order of things in which he lives. They only make this reservation: that every act of man is itself *predetermined* by certain causes; but that is a question in pure metaphysics into which we have not to enter in this place. Without doubt, here as in the sphere of physical phenomena, this action of ours is restricted within certain limits, which science tries to mark out, and which all men, whether acting individually by means of private enterprise, or acting collectively under legislative regulation, should make it incumbent upon themselves to respect. Here we might quote Bacon's old adage, "Naturae non imperatur nisi parendo"; for the modification of economic facts, economic laws must be known and conformed to. Alchemy strove to turn lead into gold; chemistry has abandoned that useless quest, having found that these two bodies are simple elements, or at least irreducible ones; but it has not renounced the attempt of converting charcoal into diamond, for in this case it has established the presence of one single body in two different states. The Utopian uselessly tortures nature to ask and obtain what it cannot give him; the man of science asks only for what he knows to be possible. But the sphere of this term "possible" is far wider than the classical school imagines.

Section 2. The Socialist School.

The socialist school is as old as the classical school; older, we may even say, for there were socialists long before there was any political economy. As the doctrines of this school are especially critical in nature, they are far harder to formulate than those of the preceding school. Still they may be summed up as follows, at any rate, in their essential features.

The various socialist schools hold that the organization of modern societies is tainted by certain essential vices, and is therefore destined to disappear at a more or less near future. In their eyes, this organization is not in the least a natural product of liberty, but is the result of a long series of acts of injustice and spoliation which have been in a measure hallowed by written laws.

Their special objects of attack are private property and free competition, and their aim is to prove that the action of these two great springs, which set in motion the whole social organism, tends to sacrifice social to private interest, and to enable a few privileged persons to live at the expense of the huge body of the disinherited.

They wait, then, for a new order of things, in which private property, if not completely abolished, will at any rate be reduced to the minimum which is compatible with the just requirements of human personality, and in which personal interest will no longer be the sole motor power, and will be subordinated to the collective welfare. As to the manner in which this future society is to be brought about, the various schools have numerous divergent theories. Some, who might be called *idealists*, but who are most usually termed *Utopians*, and whose doctrines are nowadays somewhat, perhaps too much, discredited, strive to build up this future society like a new house, with certain *à priori* principles of justice as foundation and as scale. Others, who proudly assume the title of *scientific* socialism, assert that this future society will *suâ sponte* issue forth from present society, like a butterfly from its chrysalis. In the most interesting and original portion of their thesis they

labor to prove that this society of the future is now reposing, in the state of an embryo, in the womb of our present-day societies, which are already ripe for such a birth. It is sometimes carelessly said that this school contests the existence of natural laws; that is perfectly incorrect. On the contrary, it is irreconcilably determinist; only, while for the liberal school the term "*natural law*" implies the idea of stability and immutability, to the socialist school it presents the idea of unlimited change and transformation. Instead of regarding human societies as Bastiat regarded the solar system, as turning round a fixed point and suspended in an eternal and changeless equilibrium, it pictures them in the shape of a plant or an animal, which from birth to death is undergoing ceaseless transformations. We must confess that this is exactly the standpoint of contemporary science. Even the solar systems undergo change and transformation.

In general, save for a few exceptions, it considers the Revolution to be indispensable for the substitution of the new order in place of the present. Coming from evolutionists, this manner of looking at things is at first sight rather astounding; they attempt to justify it by noting that the process of evolution is often accomplished by means of crises; *i.e.* by the brusque and even violent passage from one state to another. They instance the chrysalis, which, before becoming butterfly, must tear away its cocoon; or the chicken, which, to leave the egg, must break the shell with its beak.

All these schools (save one alone, the anarchist school, which, on the contrary, is violently individualist) are naturally disposed to extend as far as possible the functions of the collective powers, represented by the State or by the municipalities, since their aim is to transform into public agencies all that which to-day springs from private enterprise. It is only, however, as a transition step that socialism asks for the extension of the functions of the State. For it professes the greatest contempt for the State as it is to-day, the *bourgeois* State, as it terms it, which looks after its interests and carries on its enterprises by the same methods as are used by

individuals. In its plans for reorganizing future society, this school avoids even pronouncing the word "state," and prefers to use the term "society." The State, in the socialist plan, is to lose all political character, so as to become purely economic; it is to become something analogous to the administrative council of a huge co-operative society, embracing the entire country. It is on this point that true socialism can be distinguished from State socialism.

At this stage we cannot gauge the value of the criticisms directed by the socialist school against the existing order of things; we shall come across them once more in the course of our further exposition. Suffice it to say here that they appear to contain a somewhat large portion of truth. It is especially from the critical point of view that contemporary socialism has produced some remarkable works; notably, those of Proudhon in France, and those of Karl Marx in Germany.

But it is from the positive, or, if it is preferred, the constructive point of view, that the weak side of this school is discoverable; and we must observe that its most distinguished leaders, especially those whose names have been just mentioned, have prudently avoided any entrance into that field. The detailed exposition of the socialist ideal may, however, be seen in Schäffle's *Quintessenz des Socialismus* (a German book, which has been translated into French and into English), in Gronlund's *Co-operative Commonwealth*, and in Bellamy's very successful novel, *Looking Backward*. In fact, whatever be the imperfections, or even dangers, of personal interest, and the desire to grow rich, as the motor power of the economic mechanism, it is not easy to see by what other means men can be made to stir. There are only two possible means, — *compulsion* and *love*. Now love, or *altruism*, as it is called in opposition to egoism, would indeed be the true solution, and we must hope for its realization in the future. But the socialists, who are relying on such a motor force at this time of day, are certainly showing their possession of an optimism which is as stubborn in its own way as that for which we were just now

blaming the economists. Before man makes up his mind to work purely out of love for his neighbor, a more radical transformation would be necessary than could be brought about by any social revolution. Man would have to procure a new heart.

There is, therefore, reason to fear that, the motor spring of love failing them, the socialists will be obliged to fall back upon compulsion; now, besides the circumstance that the loss of liberty would be too high a price to pay for the general welfare, even at this price it is doubtful whether the desired result could be attained. For, in order that the production of wealth shall be abundant, the employment of individual energy is always requisite, and experience shows that a *régime* of compulsion forbids the full exercise of such energies. Further, many socialists believe that they will be able to dispense with individual initiative, and have recourse, instead, to the action of collective bodies, the State, municipalities, powerfully organized corporations, and so forth; but this hope is based on no sounder foundation than that mentioned above. For every-day experience teaches us that associations, great or small, are worth not a jot more than the individuals of whom they are composed. Consequently, every system which will tend to *reduce individual energy* will not stand a great chance of gaining anything especially advantageous from collective enterprises, however ingeniously they may otherwise be organized.

Section 3. The Catholic or Christian School.

Although the very epithet which is used as the distinguishing mark of this school appears to put it outside the pale of scientific classification, yet in some countries it has obtained too great a development, and even from the purely economic standpoint (our only object of study here) it presents too characteristic features for us to pass it by in silence.

The Catholic school, like the classical school, firmly believes in the existence of natural laws, called by it providential laws, which govern social as well as physical facts. But it believes that

the working of these providential laws may be seriously deranged by the action of human liberty, and that this indeed has actually come to pass by man's own fault; the world is not what it was destined to be, what God would have wished it to be. We must observe that Fourier's theory[1] also consisted of the asseveration that for man there is "a plan of God" the secret of which has been lost through man's own fault, but which he must try and rediscover. The Catholic school differs from the liberal school in not being in the least optimistic; it regards the social order of things neither as good, nor even as naturally tending towards the best; above all, it does not trust to *laisser faire* for the re-establishment of harmony and the confirmation of progress; for it is in this very liberty, or rather in liberalism, that it discovers the real cause of social disorganization.

To take its programme: it hopes to re-establish social concord by the influence of a triple authority, that of the *father* in the family, of the *employer* in the workshop, and of the *Church* in the State, these several "social authorities," of course, being bound to carry out reciprocal duties. It is not hostile to the interference of the State, which, to quote the words of Pope Leo XIII., "is, after the Church, God's minister for good."

The vehemence of the criticisms made against the present organization of society by the Catholic school, together with its appeal to State interference in certain cases, has caused economists of the liberal school to call it *Christian socialism*. Against this imputation it vigorously protests, and in truth, except for certain points of view which are common to them, it differs from the socialist school *toto orbe*.

Firstly, in that it has no intention of abolishing the fundamental institutions of social affairs as they are, such as property, inheritance, the wages system, etc.; but proposes, on the contrary, to restore, that is to say, to strengthen them.

[1] The features of Fourier's system are described in detail by Professor Gide in his introduction to the volume *Charles Fourier, Œuvres Choisies* (*Petite Bibliothèque Economique*, Guillaumin, 1890). — J. B.

Secondly, in that it disbelieves in evolution and in the indefinite progress of the human species, and seeks its ideal far less in the future than in a return to some of the institutions of the past, for instance, to the family stock, to rural life, and to professional corporations of employers and workmen acting together.

The term "family stock" (*famille souche*) is used by the school of Le Play to designate the family strongly bound together and stable as in older days, so as to form a small permanent society existing within society at large. This is in opposition to the unstable and constantly scattered family which is the characteristic feature of modern societies.

Le Play's school is a branch of the Catholic school,[1] which, however, is differentiated from the latter, and therefore becomes more approximated to the liberal school, by a stronger tendency to lay action as opposed to Church interference, and by a narrower limitation of the sphere of State interference.

Brushing aside all controversy that might trench on political or religious ground, the strongest objection that could be made to this body of doctrine taught by the Catholic school was long ago formulated by John Stuart Mill, when he asserted that there was no example of any class whatever, when in possession of power, having exercised that power for the benefit of the other classes of the community. It is greatly to be feared that, if ever the task of solving the social problem were entrusted solely to the ruling classes as employers, the mournful fact animadverted on by John Stuart Mill would receive but one confirmation the more.

There is also a Christian (but not Catholic) socialism which is taking a more prominent place in Protestant countries, both in England and in the United States.[2] Though denouncing the

[1] See the article of Mr. H. Higgs "Frédéric Le Play" in the *Harvard Quarterly Journal of Economics*, July, 1890. — J. B.

[2] A sign of its presence in England is the formation of the "Christian Social Union" and the publication of its organ, the *Economic Review*. The leading members and writers are adherents of the High Church party in the English Church. — J. B.

iniquities of the existing social order with no less severity than the Catholic school, and likewise waiting for "a land in which justice dwells," it is deeply divided from the Catholic school by its programme. For the conservation of social peace or concord it relies less on the authority of a few "classes" than in the increasing *solidarity* of all classes, and co-operative institutions appear to it to be the best means for bringing about such a solidarity. Thus, though it does not in a general way refuse all State interference, still it is jealous to preserve all individual energy.

Section 4. The Historical or Realist School.

The school which was at first called "historical," or that of the "socialists of the chair" (*Katheder socialisten*), but which more readily receives the name of the *realist* school, sprang from a reaction against the classical school, as regards both its method and its tendency. It first saw the light in Germany about forty years ago, and professors of the German universities are still among the number of its leaders. By now, however, it has drawn into its fold many professors of political economy of all countries save France. (Reference may be made to the author's article "The Economical Schools in France" in the *New York Political Science Quarterly*, December, 1890.)

The commencement of this school is usually dated by the publication, in 1854, of Roscher's *Treatise of Political Economy*. It was in Germany, too, that the historical school of Law first arose under the guidance of Savigny.

As to its method, the realist school absolutely rejects the deductive method, which is based on *à priori* reasoning, on abstractions, and on hypotheses, and asserts that the only way of arriving at truth is by the patient observation of facts.

It is to history that the realist school turns for the study of social and economic facts; for history alone, by teaching us how economic and social institutions have been formed and are being transformed, can enlighten us as to their real character.

Now social institutions, when studied from this historical stand-

point, are seen to be exceedingly changeable, varying, indeed, from nation to nation, and ceaselessly undergoing mutations in the very midst of any one individual people. In this manner the historical school claims to blow to the winds that double character of universality and of permanence which the classical school used to attribute to economic phenomena and used to gild with the name of natural laws. We must therefore cease to look for any general laws which regulate man as an abstract being, but must rather seek for the historical laws that govern the relations of men living in a specified society. Hence the name sometimes bestowed on this school, that of the "national-politico-economical" school.

Whilst the classical school regards landed property and the wages system as definitive institutions which arise from necessary and general causes, the historical school merely looks on them as simple "historical categories," which spring from diverse causes and assume very variable forms according to the country and to the age.

As regards its tendencies, this realistic school altogether rejects the principle of *laisser faire;* in its opinion economic science has a practical aim to reach; when a social science is in question, it thinks that the old distinctions between an "art" and a "science" are out of duty, and in this manner resorts to the conception entertained by the earliest economists (see page 2). It holds that we can only hope to modify economic institutions in the direction pointed to us by history, and that therefore the science includes the art in the same manner as the past contains the future. "What is, what will be, what *ought* to be," are to this school inseparable terms.

Precisely because of the little weight it allows to the notion of natural law, it attaches a proportionately greater importance to the positive laws emanating from the legislator, and beholds in them one of the most important factors of social evolution. To quote M. De Laveleye (*Elements d'économie politique*, page 17), "The laws with which political economy is concerned are not the laws of nature; they are those laid down by the legislator. The former elude the will of man; the latter proceed from it." Hence it is led to considerably extend the functions of the State,

and on this point does not in the least share the antipathy or the distrust felt by the liberal school. This tendency has earned for the new school, or at least a section of it, the name of *State Socialists*.

This school has of late greatly influenced not only men's thoughts, but likewise legislation. Most of the laws promulgated during the last twenty years, which are known as "labor legislation," as well as the powerful movement in favor of the international regulation of labor, are in large measure its work.

It has certainly rendered great service to the science by broadening the narrow, factitious, studiedly simple, and vexatiously optimistic point of view at which the classical school has always remained stationed. It has conferred on it a new life by rejuvenating its somewhat empty theories with new materials drawn from history, the comparison of laws, and statistics. This school has caused political economy to quit that systematic abstention in which it was wont to enclose itself; and to the question men have so long been propounding, "What is to be done?" it has sought another reply than a sterile *laisser faire*.

As regards the delicate matter of State interference, we thoroughly agree with the new school in recognizing an historical fact in the incessant development of State functions, which, perhaps, is precisely one of those natural laws whose very existence is disputed by the school in question. Like it, too, we believe that the State's mission is to develop more and more the social solidarity (or the cohesion of society) of which it is the living image, even though for the accomplishment of this end it may have to exercise its authority and impose according to its discretion sacrifices on some for the benefit of others. Too often, alas, the State has shown itself unfit for the right exercise of this high social function; for in the past it has only served as an instrument in the interest of one class, and indeed, in the democratic governments of to-day, for the benefit of one party. Such a procedure has thus given some weight to the arguments of the liberal school. However, the education of States is gradually progressing; more rapidly, indeed, than that of individuals, who are ceaselessly carried off by death.

There is, therefore, reason to hope that when the State has been founded on more scientific bases; when political economy aids it in marking out its road, and when practical questions take the place of sterile political questions, on that day the State will be able to exercise in economics a more rational and efficacious influence than it has hitherto done.

It is with regard to its method that this new school is the most vulnerable and open to criticism. The result of its desire to be realistic and descriptive is, that it appears to have lost sight of the true character of the science, which, in spite of all endeavors, must remain in the nature of an abstraction.

Chevreul, the French scientist, who recently died, having passed the age of a hundred years, used to say, "Every fact is an abstraction."[1] Though this dictum seems a strange one at the first glance, yet it is easily understood if we only consider that what we call a fact is previously something which has had to be separated out of a host of other connected facts, and for the observation of which abstraction has had to be made of many other things.

Thus, in scoffing at the procedure and the methods of the deductive school, the new school exhibits much affectation and some ingratitude; for, in fine, it still lives and moves in the categories which were laid down by the old school. It has not exactly remade the science; it has merely informed it with a new spirit. By applying its attention to the observation of facts and the variations shown in various nations and at various times, its tendency is to fall into erudition, and to lose sight of the general conditions which everywhere determine economic phenomena. If it were necessary to renounce any attempt at discovering permanent relations and laws under the changing manifestations of phenomena, we should be obliged definitely to abandon our attempts to form a science of political economy; however dangerous to the science rash hypotheses might be, they would be infinitely less serious than such a confession of weakness.

[1] Or, as has been said by Professor Edward Caird, 'There is only One Fact, and every part of it taken separately is an abstraction.' — J. B.

BOOK I.

WEALTH AND VALUE.

CHAPTER I.

WEALTH.

I. The Desire for Wealth.

To be rich, in the popular sense of the term, is for a man to have the means of obtaining for himself good food, good clothes, good housing, and careful nursing if he falls ill; to be able to keep sufficiently warm in winter and agreeably cool in summer, to have easy means of access and of transit to wherever he wishes to go, and to partake of all the pleasures offered by civilized life to those who can profit by them. It is, too, to be exempt from the necessity of working for a livelihood, to be free to do as he pleases, and to follow his tastes and his fancy. Finally, it is to be released from all anxiety as to his future or that of his children. Wealth considered from this point of view depends on the *quantity of goods* that a man possesses, and is synonymous with abundance.

But the word "wealth" presupposes something more than this; it indicates a state of superiority, and consequently implies inequality of conditions. It points out the privileged position of a man by which he is enabled to command the labor of a multitude of his fellow-creatures, or what comes to the same thing, to dispose of the products of their labor. "Riches is power," said Hobbes, and such, in truth, is the etymological meaning of the

word (*Reich*, empire, power). Considered from this point of view wealth is a purely relative state, and depends far less on the quantity of goods possessed by a man than *on that possessed by his fellows*. If they have less than he has, he is rich; if they have as much as he has, he is not rich. It is clear that if every one was rich, there would be no more rich men.

It is not surprising, then, that from time immemorial wealth has always been ardently coveted by men; although the opinion is permissible that this desire, now raised to the rank of a passion, is beginning to assume a somewhat excessive development in certain societies, especially in those in which we live; although it may be salutary for a more austere system of morality to strive, hitherto without much success, to moderate so exaggerated a passion, yet we have no hesitation in declaring that this desire is natural and even legitimate.

To proceed: a distinction must be drawn between the motives which incite man to seek wealth; they are of two different kinds, and correspond to the two aspects under which the idea of wealth is presented. Men seek wealth, both to satisfy their wants and to mark themselves off from their fellows; they are urged in the former direction by the *desire for well-being*, in the latter by the *desire for inequality*.

The legitimacy of the first of these motives can be the more easily established. Man has the right, and even is bound by the duty of trying, to satisfy all those wants which lead to the preservation and development of his being in the broadest sense of these words. What may be blamable in the matter is not so much the desire for wealth as the means employed for its obtainal, and especially the use that is made of it. If wealth in this world were always the result of personal labor, if it were always directed towards the greatest good of man, physical, intellectual, and moral, its effects would be ever beneficial, never baneful; there would never be too much of it; nay, there would never be enough.

Unhappily, it is far too certain that in the whole world, and even in our modern societies, which are so proud of their knowledge

and so vain of their luxury, the vast majority of men do not possess even that minimum of wealth which constitutes daily bread, far less that amount of comfort the absence of which always lowers human dignity. The unequal distribution of wealth may deceive us on this point; but if a division could be made, the miserable share which would fall to each would dismay the observer. We should then be thankful that we are rather richer than our fathers, and make bold to hope that our children may be much richer than we are. If the day comes, as we must hope, when wealth will be so increased as to amply provide for the material wants of all, then it will be time to call a halt, and humanity at large will henceforward be able to devote its strength and its time to the pursuit of goods of a more noble kind.

The legitimacy of the second motive seems to be more disputable, and it is fair to hold that the desire for inequality is not a beneficent feeling. Yet it hardly appears that it could be suppressed or even much reduced without gravely injuring civilization; probably without it the source of wealth would soon be dried up. Indeed, for the multiplication of wealth we must not trust only to the former of these two motives, the desire for well-being; this feeling is not innate in man's breast, as we are too apt to suppose — witness those primitive societies which live in eternal poverty without ever seeking to emerge therefrom. It is the desire for inequality, or, if you will, what comes exactly to the same thing, the desire to rise above the common level, which is the ceaseless goad of man's natural idleness.

Mr. Mallock, an English author, has devoted a whole volume, *Social Equality*, to the development of this idea, which he defines, perhaps not without some exaggeration, in the following formula: "All productive labor that rises above the lowest, is always motived by the desire for social inequality." — *Social Equality*, pages 35, 36.

II. The Wants of Man.

There is no living being that has not certain wants, were it only that of food, which must be satisfied for the creature to live and attain its ends. The higher we go in the scale of life, the more complicated and sensitive is the organism, and the more complex and multiple do the wants become; for the being which occupies the summit of the hierarchy, for man, they are legion. Could we come to know a being superior to man, we should certainly discover that he possessed an infinitude of wants of which we in this world can form no idea whatever.

If the progression of wants is so marked on turning from lower to higher beings, it is no less striking on passing up from savage to civilized man. Had we to point out the most characteristic feature of that social state which is denoted by the somewhat indefinite term, civilization, the most noteworthy, perhaps, would be the multiplicity of wants. The art of civilizing a people consists in implanting in it new wants; this is proved by the example of savage communities.

The wants of humanity are like those of a child. The child, at birth, needs nothing except a little milk and a warm covering; but little by little he comes to require more varied food, more complicated garments, and, moreover, toys; each year arises some new want, some new desire. We, to-day, are sensible of a thousand wants which were unknown to our grandfathers, relating to comfort, hygiene, cleanliness, education, travel, social intercourse; and it is certain that our grandchildren will have further needs. The more we see, the more we learn, the more our curiosity awakens, and the more, too, do our desires increase and multiply. Each invention, each idea that is born into the world, engenders a whole generation of new wants. Doubtless, some of the number do not continue, and after having lasted for a few generations, or perhaps only for a few days, sink like dead leaves falling from the tree; maybe the very caprice that gave them birth abandons them, as with the ephemeral creations of fashion; maybe a new and con-

flicting want dethrones its predecessor. But in a general way, the number of wants which disappear far from balances the tale of those which arise, and just as with the generations of men we have a crowd which goes on multiplying from age to age.

A school of moralists which dates from a very high antiquity, reckoning among its founders Diogenes with his tub, regards this progressive and indefinite multiplication of wants as a great evil, which political economy should apply itself to stop. But, for our part, we can see in the development of these wants nothing more than the normal development of human beings; we think that an attempt to restrict the former would be to rob the latter, and that for the suppression of wants we should first of all have to suppress ideas.

Without doubt, among these wants, which are ceaselessly springing up among the generations of man, there are many which are frivolous or even harmful, and which far from favoring man's development only serve to retard it; *e.g.* the taste for alcoholic liquors. But we must observe that for the efficacious eradication of any want whatever, the best means is to substitute another one. Indeed, to combat this very alcoholism, temperance societies have found that the best mode is to open establishments in which an attempt is made to accustom consumers to drink tea or coffee. There is reason to hope that in the future, when man's aims are more enlightened and his desires are conformable only to his true nature, he will be able to follow them without *arrière-pensée*, and to strive to satisfy them without experiencing remorse.

Even admitting that in certain cases *contentus sua sorte* may be the motto of a philosopher, it should never be the watchword of a people. Woe to the races which are too easily satisfied, whose desires do not stretch beyond the narrow circle of the bounding horizon, and whose only requisites are a handful of ripe fruit for food and a nook in a wall where they may sleep shaded from the sun! They will not be long in vanishing from an earth the capabilities of which they have not turned to advantage.

The school of moralists, of which we have just spoken, starts

from the idea that the fewer wants a people has, the more time will it devote to intellectual speculations. But experience shows that in reality, the inverse order of things comes to pass, and that the fewer wants that races have, they are, in general, the more idle, ignorant, and swayed by the grossest appetites.

It is easy to understand in virtue of what law the wants of man tend to develop in this wise. A want, still timid and ill-defined, arises first of all in the bosom of one single man, or in the hearts of a small group of men; in those, only, who from their privileged position have already been able to amply satisfy the primary necessities of life, and who then turn their desires to a new horizon. But man, before all, is an imitative being; by *imitation* the want is immediately propagated. Like an epidemic it speeds from neighbor to neighbor. Every one feels it, or fancies he does, and applies himself to find some means for satisfying it. In proportion as the progress of industry allows the gratification of this satisfaction with greater ease and at less expense, the imitators continuously increase in numbers, and what was at first merely a caprice of luxury, reserved for those favored by fortune, soon penetrates the lowest strata of society. This subject is treated in an interesting way in M. Tarde's book *Les Lois de l'imitation*, to which we have previously referred.

From another side, in addition to having surface extension, the want also gains in depth. Man is not only an imitative being, he is also a being with habits; desire, once felt and regularly satisfied, gradually becomes fixed, takes root, and can no longer be torn away without a painful shock. As is so well expressed in popular language, it becomes second nature. At one time workmen wore neither linen nor foot-gear, had neither coffee nor tobacco, and ate neither meat nor wheaten bread; nowadays these wants have become so inveterate, that the workman who was unable to satisfy them and was suddenly reduced to the condition of his fellows in the times of Saint Louis or Good King Henry would certainly die.

If we add that a habit which has been transmitted through a

long series of generations is not slow in becoming fixed by means of heredity, and that the senses grow more subtle and more exacting, we shall be able to appreciate the despotic power acquired in the long run by a want which at its origin appeared to be the most futile or the most insignificant.

It would be impossible to give a complete classification of the wants of man, but most of them can be ranked under these four heads: *food*, *housing* (including furniture, heating, and lighting), *clothing*, and *ornament*. The first two are shared by man with the animals; the last two are peculiar to him. The last of all, whatever may be said as to it, is as natural to man as the preceding are; in fact, it might even be placed before clothing. As Théophile Gauthier has remarked, the Papuans, who go about stark naked and eat earthworms, hang colored berries from their necks and ears, and cover their bodies with tattoo-marks. Very nearly all the wealth to be found in all countries exists only to satisfy these material wants, particularly the first one, food; and this holds even in societies which have reached a high pitch of prosperity and might be thought to have done with these first necessities of existence. [Let the quantity of nourishment necessary for each Frenchman be on the average ten pence a day — by no means an exaggerated amount; this represents, for the whole of the French population, a yearly consumption of £560,000,000 sterling, or probably more than half the entire production of France!] Yet education, the taste for the beautiful, the need of social intercourse or of travelling from place to place, the desire for always knowing the latest news, or for amusement, nay, for fighting, which is more fashionable than ever, — all these call into existence a number of important articles of wealth in the shape of libraries, telegraphs, and telephones, carriages, tramways, omnibuses, newspapers, theatres, pictures, music, cannon, and ironclads.

III. The Definition of Wealth.

In the vocabulary of political economy, the word "wealth" has not altogether the same meaning as it has in popular speech. It does not exactly denote a *certain state*, a certain fortune, the fact of being rich, but it points out *certain things*, all those things the possession of which can obtain for us any satisfaction whatever, independently of any idea of quantity or of opulence. In this sense, a bit of bread, a pin, a farthing-piece, is from the economist's point of view as much wealth as is an estate, a diamond necklace, or a certificate of government stock.

The first condition necessary for a thing to be termed wealth is that it should serve to satisfy some want or desire, in other words, that we should *judge it to be useful*; for utility is nothing but the correlation we establish between certain things and our wants.

The judgment that we thus pass on the utility of things may chance to be gravely erroneous.[1] Relics of more or less authenticity have been for many centuries, and to-day even in some countries are still regarded as incomparable wealth, on account of certain virtues which are attributed to them. Many mineral waters and pharmaceutical preparations are much in request, though their healing properties are far from being proved. No matter; whether useful or not, the mere fact of our judging them to be such constitutes them wealth.

Generally, however, our judgment is not altogether blind, and our holding a thing to be useful arises from our having reason to believe that it really is so, from our discovery of some relation between its physical properties and some one of our wants. Bread is useful, partly because we have need of nourishment and partly because corn contains just those elements which are specially fitting for our food. The diamond is so highly prized because it is in the nature of man, as well as in that of some animals, to experience pleasure on looking at shining objects, and the diamond, in virtue of its powers of refraction, which excel those of any other

[1] *i.e.* from the point of view of a riper wisdom. — J. B.

known substance, has just this property of shedding incomparable beams.

It is for science to enlighten our judgments by instructing us as to the properties of bodies and the laws of nature. In this way, thanks to discovery and invention, the patrimony of humanity is increased every day by some new conquest: at one time, out of the clay which constitutes the mud of our streets, human industry makes the sparkling, solid, and at the same time light metal, which we call aluminium; at another, it converts the foul waste of coal into colors which are more splendid than Tyrian purple. Yet the list of the things that we make use of is still exceedingly small, when compared with the immense number of those that we turn to no account. Of the 140,000 known species of the vegetable kingdom, less than 300 are used in farming; of the millions of species reckoned in the animal kingdom, there are scarcely 200 that we have turned to any service; and with inorganic bodies the proportion is not more favorable (De Candolle, *Origine des plantes cultivées*, page 366). But the list of our riches is lengthened every day, and there is every reason to believe that, were our knowledge perfect, this vast world would not contain one blade of grass, one grain of sand, in which we had not been able to discover some measure of utility.

However, to be able to reckon a thing in the number of our riches, it is not enough to know that it is useful; it is also necessary that *we should be able to utilize it.* Knowledge is power, as the saying goes, but that is not always true; our knowledge may remain in the purely speculative stage and not supply us with any practical means of reaching our ends. We know that the diamond is a crystal of carbon, but we have not yet succeeded in making diamonds out of coal; we know that in China or in Tonquin there are very rich coal mines, that on the African plateaux there are fertile and healthful tracts and probably gold mines, but for various reasons neither the ones nor the others are within our reach, and we cannot work them. They are, therefore, not wealth, at least for the present, any more than are the fertile tracts or

precious metals which the astronomer, by aid of telescope or spectrum analysis, might discover on Mars or on Venus.

Those primary conditions indicated above are beyond the reach of discussion; but there are two others which have for long excited famous controversies among the learned, though fortunately they are merely questions as to words.

The first question is, Does the definition of wealth necessarily imply the idea of *materiality?* In the eyes of all the older economists, and of the greater portion even now, this further condition appeared to be as indispensable as the two primary ones; and it is certain that in current speech the word "wealth" necessarily awakens the idea of a "thing" (*res*) which is perceptible by our senses, can be touched, can be counted, can be weighed. We may certainly say that virtue, talent, and *savoir faire* are wealth, but we shall be thought to speak in metaphor.

However, it is our opinion, though not formed without some hesitation, that this condition is not indispensable, and that the metaphor is in fact the reality. Everything that is of a nature to answer to any desire felt by man and to obtain for him certain advantages, everything that in his eyes is worth the trouble of being paid for, either at the price of a personal effort or by the sacrifice of a sum of money, necessarily falls within the sphere of political economy and constitutes "wealth."

The opinion given by the physician is wealth by absolutely the same right as the morphia he administers to his patient; the instruction that a professor gives his pupils is wealth in exactly the same way as the book he publishes and exhibits for sale at the bookseller's. If the barber's pole or shaving-dish which is exposed as his sign outside his door is regarded as wealth, surely we should consider as wealth of a like nature the name and the social standing of a business firm or a banking house.

Besides, if this terminology be found to clash too violently with our inherited habits of speech, nothing prevents us from restricting the term "wealth" to "things" properly so called, and to give the name of "*services*" to every act of man which is able to pro-

cure any satisfaction for his fellows, in a direct manner and without intermediate incorporation in a material object. However, some very recent writers — *e.g.* Clark, Pantaleoni, and Mazzola — have remarked, not without considerable subtlety, that to give a man any gratification, he must be acted on by means of his senses, and consequently by the intermediation of some material object, — the sound-vibrations of the air in motion, the luminous vibrations of the ether. Thus the words of the lecturing professor would not reach us in a vacuum, nor would the facial expressions of the actor be visible in an unlit night. From this point of view, then, we may say that there cannot be any "non-material" wealth.[1]

We now come to the second question, Does the definition of wealth necessarily imply the idea of *value?* This condition is no more indispensable than the other. The idea of value is not necessarily bound up with the idea of wealth; for surely a fertile soil, a mild climate, a fine network of navigable rivers, and safe and deep roadsteads are the earnest of wealth for a country; and yet they have no exchange-value. It is even possible to establish an antithesis between these two terms; "wealth" corresponding to the idea of abundance, "value" answering to the idea of scarcity. Let us suppose, for example, that by a lucky miracle worked by human industry all products were to be so multiplied as to become as abundant as spring water or the sand of the shore; should we not have to regard this marvellous multiplication as an increase of wealth, nay, as the climax of wealth? Yet according to the above hypothesis, all things, precisely on account of their superabundance, would have lost all value; they would have neither more nor less value than that very spring water or those grains of sand with which we just compared them.

This, however, is the question which J. B. Say thought to be the

[1] This argument alone would drive us back to the position which the author, perhaps too hastily, abandoned. The arguments against regarding good-will of a business, etc., as wealth, *over and above* the particular things and services to which they relate, are given by Dr. Böhm-Bawerk, in his *Rechte und Verhältnisse* (1881). — J. B.

most difficult in political economy, and which he set forth thus: "Wealth being made up of the value of things which are possessed, how can it come about that a nation will be the richer by lowering the price that is asked for those things?" — *Cours d'économie politique*, Part III, Chap. V. Proudhon in his *Contradictions économiques* raised again the same questions and defied "any serious economist" to answer it. This contradiction is only arbitrary, and arises solely from a certain double meaning of the term "wealth," of which we have already warned our readers (*vide* page 31 *seq.*). As far as the word "wealth" means satiety, comfort, it is connected only with the idea of abundance, and is completely independent of the idea of value in exchange. It is considered under this aspect when we treat of a country, or better still, of humanity at large. But when "wealth" signifies inequality, the relation of superiority of one individual to another, in this sense the idea of wealth is inseparable from the idea of value. A vineyard proprietor, for instance, is rich not in proportion to the greater or less abundance of the vintage, but in proportion to its greater or less degree of value. If he were the only person who had grown wine that year, his wealth would be at its maximum; but if wine was as plentiful as spring water, he would be ruined. Madame de Sévigné expressed this most picturesquely when she wrote from Grignan (October, 1673): "This whole place is bursting with corn, and I have not a farthing. Seated on a heap of corn I shriek, 'I am starving.'"[1] If we repeat our previous supposition, that all products became superabundant, in that land of plenty there would clearly be no more rich persons; for henceforward all men would be equal before the valuelessness of things, just as Rothschild and the beggar are equal under the light of the sun.

We might get clear of our difficulty by being careful to use the word "goods" (*bona*) instead of "wealth" whenever the term is used in an absolute sense to denote abundance, welfare, and to

[1] See the article "Abundance" in Palgrave's *Dictionary of Political Economy*.— J. B.

reserve the word "wealth" for the cases in which it is taken in its relative sense, as denoting a certain social situation.

Yet it happens that, as in practice wealth is only regarded from the point of view of the relations of individuals with individuals, the second acceptation of the term is by far the more widespread; hence in ordinary speech the idea of wealth is always associated with the idea of value. This latter, however, is a distinct idea, and now requires our separate study.

CHAPTER II.

VALUE.

I. What is Value?[1]

When we know that a thing is suitable to procure for us any satisfaction whatever, it thereupon becomes the object of our desires. But even of the things which are of a nature to obtain for us certain satisfactions, all are not equally desired or equally desirable. We do not place them casually on the same footing, but we arrange them in a sort of hierarchy. Some we prize very highly, others we think of little worth; in a word, we have preferences.

Now, the order of these preferences, this unequal place in our esteem which we attribute to them, is precisely what is expressed by the word "value." To say that gold has more value than silver, or, more generally, that gold has a great value, simply states the fact that for one reason or another (which reason we shall try and find by and by) we judge that gold is more desirable than silver, or more desirable than any other object. Value, then, which is the dominating idea in all political economy, denotes nothing more than a fact which in itself is very simple, the fact that a thing is more or less desired. Were the word French, we should only have to say, "Value is *desirability*." It is much to be wished that this word, though a trifle barbarous, may be allowed to be added to the vocabulary of political economy, which up to the present is by no means rich.

[1] This section would perhaps have been clearer, if the author had seen his way to adopt the distinction between Subjective and Objective Value drawn by the Austrian Economists and corresponding roughly to the old-fashioned distinction between Value in Use, and Value in Exchange. — J. B.

But from this idea, however simple it be, some very important consequences spring.

Section 1. Since value arises from desire, it proceeds from us rather than from things; as we say nowadays, it is *subjective* far more than objective. It is not attached to objects as a quality which can be perceived; it is born at the moment when desire awakes, and vanishes when it dies out. Like a butterfly, desire flutters from thing to thing, and value abides only where desire rests.

Doubtless if an article of wealth is one of those which answer to the permanent wants of the human race, say corn or iron, it will be able to maintain its value throughout the ages; but if it is one of those which only correspond to those changing wants that are daily turned topsy-turvy by the caprices of fashion or the discoveries of science, then its value is as ephemeral and fugitive as the want which created it. Dresses that are no longer worn, books that are no longer read, pictures that have ceased to be looked at, remedies that no longer cure, — how long the list would be of those riches which have lost their value! But yet, if by chance the desire of the collector, perhaps the most intense of all desires, happens to settle on these dead riches, they will receive a new lease of life and will immediately obtain perhaps a far higher value than they had in the course of their previous existence. But value varies not only at different times, but also from country to country and even from individual to individual. We all know the proverb *de gustibus non disputandum:* let us add "and values"; for they too depend on each man's tastes.

Nor is this all: value may vary in each individual according to circumstances. A starving man will rank food as the first in the order of his preferences, and like Esau will sacrifice a fortune in exchange for a mess of pottage; but when once filled he will give not a farthing for it.

Yet an objection presents itself. If value has thus a purely subjective, individual character, does it not appear that each thing ought to have as many different values as there are individuals? But such is not the case; in the market corn is sold at the same

price for every one: the starving man will pay neither more nor less than he who is filled to repletion. We are so accustomed to this fact that it seems perfectly natural; yet it is somewhat surprising. It is explained by the competition which takes place in the same market between the sellers and buyers, and which brings it about that no one, however strong his desire may be for a thing, will consent, usually speaking, to pay more for it than his neighbor. The value of the sack of corn does not precisely depend on the desire any person may have for this particular sack, but on the general desire all the persons in the market may have for the sacks of corn there on sale. See for this matter "The Effects produced on Value by Competition."

However, if we satisfy ourselves with averages and neglect individual cases, it would not be difficult to conceive a classification of articles of wealth, arranged according to men's preferences in a fixed time and country; on this all articles of wealth would appear in their order of value, from the diamond which is worth about £2000 a grain down to water which is worth a fraction of a penny a ton. It is under this form that the idea of values should be represented, and assuredly such tables would be very instructive and suitable for informing us as to the manners and ideas of different races and different times.

SECTION II. It results, then, from our definition that the notion of value is purely relative, consisting as it does in a preference given to one thing over another. It therefore necessarily presupposes a *comparison* between the two things. It is a notion of the same class as size or weight.

To say that a thing *is worth* would be unintelligible if we did not add "is worth *more or less* than other things"; and when we use, without any addition, the current phrase that some object, say diamond, has "a great value," the term of comparison, though understood, exists none the less. We mean to say, either that it has a great value relatively to the unit of money, in which case it is compared with that specific object which we call pieces of money; or that it takes a high place in the scale of wealth, in

which case it is compared with all other wealth considered collectively. Similarly, when we say that a body, *e.g.* platinum, is very heavy, without expressing any comparison, we mean either that it represents a considerable number of kilogrammes, — that is to say, we compare it with the weight of a litre of water, — or that on making out the list of all bodies known to us, it would take the first place from the point of view of weight.

SECTION III. It follows, then, from our definition that we ought never to speak of a rise or fall of *all* values: such a proposition would be meaningless. For if value is nothing more than an order or classification established between articles of wealth, how is it conceivable that all values can at one and the same time rise or descend? In order that some may rise in the scale, they must take the place of others, which consequently must fall. It is just as if the candidates who are admitted to the *École Polytechnique* or the *École Normale*, and classed according to order of merit, were to ask if they could not all at the same time have obtained a higher place. However, as we shall see presently, a general rise or fall of *prices* is a perfectly intelligible and indeed very frequent phenomenon.

II. What is the Cause of Value?

We have just stated that things have greater or less value according as we desire them more or less; in fact, that the order of values is none other than the order of our preferences.

But that is not enough: we should like to penetrate deeper and discover the rationale of these desires and preferences. Why do we prefer one thing to another? If we can answer this question, we shall have lighted on the cause, the essential element of value. Unfortunately this is the most difficult inquiry to be met with in all political economy. If we are dealing with two objects which answer to the *same want*, then we have not much trouble in finding our reply; we shall certainly prefer the one which by virtue of its qualities appears the better fitting to satisfy our want; *i.e.* which is the more useful: of two fruits of the same species we shall choose

the more luscious, of two sheep the fatter, of two pictures the better painted, of two rooms the more comfortable, of two pieces of land the more fertile; in fact, of any two commodities whatever we shall choose that which is of the better quality. If the two objects satisfy the same want equally well, then they must have the same value.

On this hypothesis, then, *utility* seems to be the *raison d'être* of our preferences, and therefore the true foundation of value.

But now let us consider two objects which answer to *different* wants, say a loaf of bread and a hat. How shall we find the reason for our preferences? The guiding thread escapes our grasp. Here, indeed, we have no longer to compare two objects, but two wants; but our wants have no common measure.

Are we, then, to say that our wants can be accurately classified from the point of view of reason, morals, or hygiene? that thence we prefer, or ought to prefer, the objects which correspond to the most essential wants? in fact, just what is expressed in popular parlance every time anything is said to fall under the category of necessary, or useful, or agreeable, or superfluous objects?

Then utility would still stand as the reason for our preferences and the foundation of value, but only on condition that we use this word "utility" in its common sense; *i.e.* that we interpret it as meaning an object's property of answering to some more or less rational and more or less legitimate want. We should then have to say that our loaf has more value than our hat, because it is more essential for man to obtain nourishment than to cover his head.

But this conclusion suffices of itself to prove the futility of such a train of reasoning; we know well enough that a loaf is not worth more than a hat, but that the opposite is the case. The merest, nay, the most perfunctory, glance at all the things which make up our valuables will sufficiently show us that their value is most often not in direct, but far rather in inverse ratio to their rational utility. For what are the objects which fill the lowest places in the scale of values? Corn, coal, iron, water (if the last named, indeed, can

receive any value), the very objects which answer to men's most essential wants and for lack of which they would be bound to perish! What, then, are those which occupy the most exalted stations in this hierarchy of values? Gold, diamonds, lace, perhaps a broken piece of *faience* in some collection, or an edition of some old book which no one has ever read, or will ever read; that is to say, the objects which serve only to satisfy our curiosity or to flatter our vanity. However, it might be rejoined that if instead of comparing *a* diamond and *a* bushel of corn as particular bodies, we were to draw a comparison between *diamonds* and *corn* as kinds, our conclusions would be different. It is evident that though an individual would not hesitate to prefer a diamond to a bushel of corn, yet the human race, or indeed any people, were they compelled to choose, would not hesitate to prefer corn to diamonds; and as a matter of fact, the total value of the corn circulating in the world is far higher than the total value of the diamonds. That simply shows that for value, just as for wealth, there is a social or general point of view which differs from the individual point of view. But it is this individual point of view which alone concerns each one of us; we have never to buy or sell any but concrete objects. The total value of corn or of any other commodity in the world interests no one but the statistician.

Let it not be said that matters take this course because men are senseless, and that if they were wise their preferences would be dictated by reason, and the scale of values would coincide with the scale of utilities. Firstly, it is no use inquiring into what men's preferences should be in this matter; the value of things is determined by what men actually desire, and not at all by what they ought to desire. Moreover, the objection is groundless. It may be correct to say that men are wrong in attributing too high a value to trifles, but no one could assert that they err in ascribing no value at all to a glass of water; were the whole earth peopled by none but wise men, the value of water would certainly be not a farthing the more.

Let us put our question again, and try to find another answer.

Here are a loaf and a garment; what makes us prefer one to the other? However little we may reflect, we shall not hesitate in replying, "It depends upon circumstances." Man's wants cannot be placed in an invariable order like the seven prismatic colors; they are incessantly changeable, and sometimes one, sometimes another, comes to the front. If we are hungry, we shall prefer the loaf; if we are well filled, but feel cold, we shall choose the garment. If we are neither hungry nor cold, we shall think of future rather than of present wants, and shall decide our action by the following considerations. If our larder is well provisioned, we shall choose the garment; if our wardrobe is amply supplied, our choice will fall on the loaf. In fine, other things being equal, we shall always prefer that one of the two objects *with which we are the less well provided.*

Why do we argue in this fashion? for the very simple reason that no one of our wants is unlimited, and when we have enough wealth to satisfy it, we have no motive for desiring any more of the commodity. Of what use would a surplus be? We should not know what to do with it. Perhaps it may be said that we should always be able to *dispose of* it, and, as a matter of fact, people are not often seen to refuse any article of wealth because they have got enough of it. On the contrary, we consider it a wise plan always to accept. True enough; but only when others *have need of* that commodity of which we have too much, and when we therefore know that we shall be able to dispose of it profitably. The circumstance that certain men are not sufficiently provided with this commodity establishes that it is desired by them, and that it therefore acquires some value. But if it exists in such a quantity that each man is sufficiently provided with it, it is clear that no one will want more of it, either for himself, for he would not know what to do with it; or to *dispose of* it to others, for he would no longer find any purchasers.

If, as we have shown, value has desire as its foundation, it cannot exist where there is satiety; for desire, then, is also absent. Each of man's wants requires a certain quantity of wealth, but not

an unbounded quantity; there is a limit to it. As long as the limit is not reached, the desire subsists, though the nearer it is approached, the weaker does the desire become, and value subsists and decreases together with it. As soon as the limit is reached, the desire is extinguished and the value vanishes at the same moment. It is even possible, as Jevons very subtly remarks, that when once this limit has been passed, the desire we have for the thing is converted into repulsion. It is just like those series, so well known to mathematicians, which diminish as far as zero, and then begin to increase below zero, but with a negative value.

Limitation in quantity, or *scarcity*, comes then after utility and along with it as the decisive reason for our preferences. If scarcity holds such a place in our decisions, we ought not to wonder at it or regard it as the effect of some caprice similar to that of a collector-maniac, who seeks for a rare article purely that he may be able to say that he is its only possessor. By no means; if limitation in quantity constitutes the reason for value, — that is, because it is itself a consequence of the physical and moral nature of man, — its foundation rests on that physiological and psychological law according to which every *want is limited*. This doctrine was first taught by Condillac in his fine work *Le Commerce et le Gouvernement* (1776);[1] but it has been taken up again and most ingeniously developed by Stanley Jevons in his *Theory of Political Economy* (1871).

But limitation in quantity is not itself an absolute fact. There is not a thing in the world, even among products of nature, and in still larger measure, among the products of human industry, the quantity of which is so rigorously fixed that it cannot be increased by the expenditure of some effort. When we say that diamonds are rare, we do not mean that nature has put into circulation only a fixed number of specimens and has then destroyed the mould;

[1] *e.g.* ch. I. "Abundance, superabundance, and scarcity dwell rather in our opinion about quantities than in the quantities themselves; but they dwell in the opinion, only because they are supposed to dwell in the quantities." — J. B.

we merely mean that it requires much trouble or much luck to find more of them, and that therefore the existing quantity can be increased but with difficulty. When chronometers are said to be rare, it is not meant that between the ends of the earth there only exists a fixed amount of numbered samples: an unbounded number can be produced. But, as the construction of a good chronometer requires considerable time and special skill, the quantity is limited by the available time and labor. It is not probable that in France there are fewer trousers than waistcoats; yet trousers may be said to be rarer than waistcoats. For as they require more material and more time for their making, the former of these garments are not so easy to multiply as the latter, and for this very reason are generally dearer. The limitation in quantity or the scarcity of any commodity depends, then, solely on the greater or less difficulty experienced in obtaining it.

It is easy now to explain why air and water have no value. Yet are they not especially useful articles? Undoubtedly, in the sense that they answer to the most imperious of wants; but, however useful they may be, they are not *desired;* for their abundance is such that we have always enough of them, and to renew our supply, if we need air, we have but to open our mouths and draw in a breath; if water, to bend over the brook and drink. Then who troubles about a glass of water in such countries as ours? We have always enough and *to spare*, as is capitally said. For one lost, we can find ten to replace it. It is true that if we were in the desert, in "the land of thirst," or in a place where a glass of water was not easily procurable, it might become a highly desirable article; but then, too, it would be capable of acquiring a value which might be said to be unbounded, and higher than that of any other object in the world. And why so? precisely because on such an hypothesis the supply of water would be found to be insufficient. If in our part of the earth water has generally no value, it is as drinking-water, with regard to its use for quenching the thirst; for from that point of view it is superabundant. But when it is required for purposes of irrigation or for pleasure, or as

a motor force, it usually has some value, and even a considerable one. Why? Because for such uses it does not exist in large enough quantities to satisfy the wants of proprietors; hence it is rendered desirable and receives a value.

In the same way we can explain why diamonds or fine pearls, which answer to such futile wants, take so high a place in the scale of values. It is because their quantity is so very small that the immense majority of mankind possess none of them, though they desire them keenly (I speak at least of the feminine half of the species), and that even the favored owners are not usually so well provided with them as not to be able to desire more. That limiting point where satiety begins and desire dies is never reached with this kind of wealth. But if chemistry ever succeeds, as it reckons on doing, in converting carbon into diamonds, then as each man would be able to obtain as many of them as he wished, the desire would fall to zero and drag down the value in its fall. Even if the existing quantity was not destined to be considerably modified, yet the mere possibility of increasing that quantity at will would serve to chill desire and keep down value.

To recapitulate: we can answer, in the following manner, the question, "What is the cause of value?"

Things have more or less of value according as we desire them more or less keenly.

We desire them more or less keenly according as their quantity is more or less insufficient for our wants.

Their quantity is more or less insufficient according as it is in our power to multiply them more or less easily.

We may add that an excellent criterion for measuring the utility of a thing may be derived from a consideration of the degree of suffering or of annoyance that we should receive *from the privation of a small portion of this thing.* According as this suffering is *nil* or slight or intense, the utility of the thing in question will be *nil* or slight or very great. Take the utility of water. Does the reader reply that is great, nay, incalculable? By no means; for consider the suffering that will be entailed by the privation of

a glass of water; it is absolutely nothing. The value of water, therefore, is likewise nought. Similarly, the value of bread can be shown to be very slight.

This theory, which has recently become celebrated under the name of *final utility* or *limited utility*, and which is taught by most economists, *e.g.* Jevons, Walras, and Menger, seems to have been discovered in 1854 by Gossen, a German writer, whose book on the subject was long utterly unknown, or perhaps even before him by Dupuit, a French engineer.[1]

III. Critical Examination of the Various Theories of Value.

Economists have always sought for the causes of value, and each school, according to its respective tendencies, has fastened on to one or other of them. *Utility*, *scarcity*, *difficulty of attainment*, and *labor* are the principal ones which have been specially pointed out as the real cause or causes.

Utility has often been put forward as sufficient in itself to explain value, and therefore rendering unnecessary an attempt to find other causes. The chief exponents of this have been Condillac, J. B. Say, and Stanley Jevons. To the obvious objection that many very useful things have no value, this school replies that utility cannot be conceived apart from a certain limitation in quantity, and that to speak mathematically, it is necessarily a "function" of quantity. If a thing is in excess, *e.g.* water, no portion of it (say a glass of water) can be said to be useful; it is not useful, for no one thinks aught of it. What is superabundant is necessarily superfluous, and what is superfluous is necessarily useless. This doctrine comes very near the truth, and, indeed, closely resembles the opinion we have set forth. Yet we must observe that by employing the word "utility" in a somewhat different sense from its ordinary acceptation, and by attributing to it

[1] Gossen was only one out of a number. See Jevons' *Political Economy*, Preface and Supplement to second and later editions. For the relation of Jevons to the Austrian Economists (who avoid the use of Mathematics), see the *Harvard Quarterly Journal of Economics*, October, 1888. — J. B.

many things it does not mean, this doctrine forces language and seems to turn on the point of a verbal ambiguity.

The mathematical school — for instance, M. Walras — gives the preference to *scarcity;* for here this school finds that especial advantage for those who wish to introduce mathematical methods into economic science, the being able to base the theory of value on the mathematical idea *par excellence,* the idea of quantity. Scarcity is limitation in quantity, but, they add, it also implies utility; for does not calling a thing scarce mean that it is sought for and consequently is useful? If it served no purpose, no one would want it; and, if no one wanted it, it could not be said to be scarce were it otherwise unique; as, for instance, a letter written by a peasant who had never written but one in his whole life.

We must reply, however, that the idea of scarcity is not strong enough to stand alone unless we read into this word many things it does not say; for, to use a well-known example, cherries are no less scarce in July than in May, but as they are not then early fruit, *i.e.* are no longer desired, their value is gone.

The classical school in England preferred to choose *difficulty of attainment;* certainly the amount of difficulty that we experience in procuring a thing is a *condition* of its value, but it is by no means the cause. Corn draws its value, not from the circumstance that it requires long labor and exhausting work, but from the fact that we suffer hunger and that this grain is especially fitting for our nourishment. The amount of difficulty that we experience in producing corn only acts upon its value in the proportion in which it affects our satisfying of our hunger.

Finally, another school teaches that labor is the real cause of value. This theory, which has been set forth in rather varied forms, has now some position in the science; first expounded by Ricardo, it has gathered round its standard economists of the most opposite schools from Bastiat to Karl Marx.

In reality, this theory does not deny that utility — that is to say, the property of satisfying any human want or desire — is the primordial condition of all value. Of course we should have to have lost

our senses before entertaining the idea that a thing which is of no use can have any value, whatever amount of labor it may have entailed. But according to this school, if utility is the condition of value, it is not its cause or its measure. The basis of value, according to Ricardo, its substance, according to Karl Marx, is man's labor, and each thing has more or less worth according as it has required more or less labor.

The cause of this theory attracting so many generous minds is, that differing from the preceding group, which rests value on a purely natural fact, utility or scarcity, it grounds value upon a moral act, — labor. Could it be proved that the value of all our possessions, *e.g.* land, is in proportion to the labor they have cost us, we might be justified in concluding that every man's property or fortune is in direct ratio to his labor, and thus the social organization would be firmly seated on a principle of justice. Yet this doctrine, like Joseph Prudhomme's legendary sword, may be used to combat existing institutions as well as to defend them. While the school of Bastiat employs it to show that each man's fortune is proportional to his labor, Karl Marx's followers, on the other hand, seek to prove by its aid that the values possessed by the wealthy classes are due entirely to the labor of the workmen who have been basely robbed of them ; thence the conclusion is drawn that these values must be returned to those who have created them.

The theory certainly contains a portion of the truth. No one disputes that the labor necessary for the production of things has a considerable influence on their value, and this follows from the very circumstance we sought to explain in our analysis of value. We agreed that value ultimately depends on the greater or less facility we experience in multiplying things ; now, as labor is the principal factor of production, it is clear that the degree of facility we have in multiplying things will in the ultimate analysis depend on the amount of labor they require for their production.

But it follows from this very train of reasoning that labor can act on the value of things only indirectly, and purely as regards

quantity. Of itself it has no influence on value, and this is shown clearly enough by facts that can be noticed every day.

1. If the value of a thing had for its cause or substance the labor expended in its production, this value would necessarily have to be immutable; for, as Bastiat himself grants, "*Past* labor is not susceptible of increase or decrease." Now we know, on the contrary, that the value of an object varies constantly and ceaselessly; it is evident, then, that these variations are absolutely independent of the labor of production. For *à priori* reasons, moreover, it is absurd to think that the value of a thing can thus depend on a fact which is over and done. The matter is finished, there is no harking back to it, and we must say, like Lady Macbeth, "What is done cannot be undone"; let us speak no more of it.

2. If labor were the cause of value, equal values would always correspond to equal labors, and unequal to unequal. Now every moment we see objects which have cost the same amount of labor selling at very different prices (*e.g.* a fillet of beef and the tongue or the tail of the same ox); and inversely, objects which have required far different amounts of labor selling at the same price (*e.g.* one gallon of wine produced on an estate which yielded 180 gallons per acre, and one gallon of wine of the same quality produced on an estate which yields 1800 gallons per acre). Ricardo did not deny this fact, for on it he based his famous theory of Rent (see below, "Distribution"); but the explanation he gives merely establishes the incontestable fact that two objects of the same quality, *i.e.* of the same utility, have necessarily the same value, however unequal be the respective amounts of labor they have cost.

3. If labor were the cause of value, where there had been no labor there would be no value. Now there are innumerable things which possess a value, and often a very high one, without having required any labor; such as a spring of mineral water or petroleum, guano deposited by sea-birds, a sandy beach in the south of France which has been ploughed only by the wind from the open sea and which is sold at a very high price for the plantation

of vines, a few yards of ground in the Champs-Elysées, etc. Nor do Ricardo and his school deny (for the fact is not capable of denial) that there are certain objects "whose value depends only on scarcity, since no labor can increase their quantity." Yet he considers these to be insignificant, and only gives as examples valuable pictures, statues, etc. In reality, these objects form an enormous body of exceptions and nullify the rule.

4. Lastly, if labor is the cause of value, what is to be the cause of the *value of the labor* itself? For labor has certainly a value; it is bought and sold, or, if the term is preferred, is hired every day at a certain price. It is easy to explain the value of labor by the value of its products, just as the value of a piece of land is determined by the value of the crops it can yield. But if we explain the value of products by the value of the labor which has formed them, we but argue in a circle whence there is no exit.[1]

Ingenious attempts have been made to fit in this theory with the various difficulties of fact which we have just pointed out.

Carey says that the value of any object depends, not precisely on the amount of labor expended in its production, but on the labor necessary to produce a similar object; *i.e.* the *labor of reproduction.*

Bastiat says that the matter to be considered is not the labor done by the person who has produced the object, but the *labor spared* the would-be acquirer. As, according to Bastiat, the sparing a person of a certain amount of labor is to render him a service, the author of the *Harmonies* proceeds then to define value as the relation *between two services exchanged*, and to declare that a service rendered is the cause and the measure of value. This formula, in spite of its popularity for some time, is a pure tautology. To the question, "Why has a diamond a greater value than a pebble?" it answers, "Because when I am handed a diamond, a greater service is done me than when I am handed a pebble."

[1] There is a full discussion of the "Labour theories of Value" in Dr. Böhm-Bawerk's book on *Capital and Interest*, Vol. I. (English translation by W. Smart, 1890), pp. 297 *seq.* — J. B.

No one disputes so puerile a proposition, but it is enough to reply, that if the service rendered by the transfer of a diamond is greater than that rendered by the transfer of a mere pebble, it follows simply from the diamond possessing a greater value than the pebble. So we have only reversed our position. In reality, it is not the service rendered by the person who yields me the object that determines its value; but it is the value of the object yielded which determines and measures the importance of the service rendered. See in the *Revue d'économie politique*, May–June, 1887, an examination we have made of this theory.

Karl Marx declares that we have no concern with the individual labor which may have been expended in producing any object, but must deal with the *social labor*, or, rather, the average labor necessary for the production of this commodity in general.

These various theories cannot be discussed here; we shall confine ourselves to remarking that all these theories derived from the idea of labor conflict more or less with the same difficulties as the fundamental theory, and that they lack the merit which it possessed of satisfying the idea of justice. We have agreed that there would be harmony if it could be proved that the value of an object is proportional to the amount of effort that must be expended for its production; but this harmony vanishes or becomes very doubtful if we content ourselves with showing that the value of an object is only proportional to the labor necessary for reproducing a similar object (as Carey says); or to the efforts that must be made to procure a like object (as Bastiat says); or to the average amount of labor required for the industrial production of this class of objects (as Karl Marx says).

To recapitulate: the numberless theories which have been propounded for the explanation of the phenomena of value may be divided into two distinct groups or tendencies.

The one is bound up with the idea of utility, and rests value on man's *wants;* the other is bound up with the idea of labor, and rests value on man's *efforts*.

The first is, in our opinion, the expression of *what is;* in fact,

the value of things is proportional to our wants or desires. The second is the expression of *what should be;* in point of equity it is to be wished that value might be proportional to our efforts or labor.

It would prove us to possess an unscientific mind if we were to think that the natural law of values can ever be changed; but we are not debarred from hoping that in spite of or by means of this law we may succeed some day in making fact more conformable with equity; that is to say, in rendering value more and more proportional to labor.

IV. Variations in Value.

That imaginary list on which we supposed all articles of wealth to be ranged in order of preference has, we are aware, no stability about it. The value of each thing — I mean its place relatively to the others — constantly varies. The reason for this is evident; for value springs from our desires, and what could be more changeable than they are? Even granting that we are dealing with some physiological want, such as the need of food, yet, since there is an infinite variety of objects capable of satisfying that want, our desire can turn from one to another, and can make all of them in turn ascend or descend on the scale of values.

Can we trace any general principles or laws which regulate these movements? We can; and such an investigation is of the greatest interest. If, as we have previously said, utility and limitation in quantity are the two elements of value, the moving springs of our desires, it follows that, if both or one of these elements happen to vary, value will necessarily vary.

Firstly, If the utility of a thing constantly increases, its value will increase in like manner. This is the case with land, whether a building site in town, or cultivable ground in country, the utility of which increases regularly in proportion as a growing society has need of more room and more food. Therefore the value of ground, except in temporary crises, is in a state of constant progression.

Secondly, When, on the contrary, the utility diminishes, other things being equal, value must fall. This is the case with the precious metals, and especially with silver, which daily loses in value, not only because the more refined taste of the present day does not require it so much in the shape of plate or jewelry, but mainly because the improvement in instruments of credit gradually impairs its utility as money.

Thirdly, When the quantity increases, other things being equal, value must diminish. This is the case with manufactured products, which machinery enables us to multiply daily with growing ease.

Fourthly, When the quantity diminishes, other things being equal, value must increase. This is the case with game, which, after having formed the usual food of man when societies were in their infancy, has so diminished in quantity, in consequence of the opening up and the putting into cultivation of land, that in all civilized countries it is nowadays merely an article of luxury reserved for the table of the rich. The same, perhaps, will happen some day with butchers' meat; for in every civilized country the same causes are tending to restrict more and more the amount of land devoted to the pasturage and the breeding of cattle, and consequently, the quantity of cattle in proportion to the population. Of all commodities, it is meat which rises the most rapidly in price.

But besides these variations that we might call secular, because in the course of ages they slowly and uniformly displace articles of wealth in the scale of values, and which will be more easy to understand after we have studied the laws of production, there is another class of variations to which every value is subject: these might better be styled oscillations, for they recur after short intervals, sometimes in one direction, sometimes in another. Expressed in terms of money, they can be read in the variations of the market rates of commodities as they are daily quoted in the newspapers. These variations, though perhaps less interesting for the economist, are of far more consequence to the business man and the manufacturer, for on these depend their profits or their loss.

For instance, fish has what may be called a normal value, resulting on the one hand from the utility of this food, that is to say, from the degree of taste that consumers have for this kind of nourishment; and on the other hand from the limitation in its quantity, according as the country has a larger or smaller coast-line, according as its seas are better or worse stocked with fish, and according as a larger or smaller number of its inhabitants devote themselves to this particular fishery. But, over and above this normal value, itself a variable one, yet varying but slowly and then generally in the direction of a rise, the value of fish when in the market is liable to a host of temporary variations. Thus on fast days in Catholic countries fish rises in value, acquiring on such days a new utility on account of the decrees of the Church, which permit no other animal food. Inversely, its value will fall if the haul has been especially abundant.

These oscillations are usually said to be regulated by *the law of supply and demand*. This celebrated formula was for long regarded as the fundamental law of political economy, and was employed to explain any sort of phenomenon. Since then, however, it has been much criticised and has incurred some discredit.

In its most simple sense this formula means: the price of every commodity in a market depends on the relation which exists between the quantity offered by the sellers and the quantity demanded by the buyers. If the demand is greater than the supply, the price rises; if the supply is greater than the demand, the price falls. In this sense the proposition is evident. But, really, this formula contains nothing more than the two elements of value we are already acquainted with, viz., utility and scarcity, regarded as acting at a fixed time and place. It is clear, then, that the larger or smaller quantity of goods that the sellers may offer in the market constitutes what we have called scarcity, whilst the larger or smaller quantity demanded by the consumers depends on the degree of intensity of their wants or desires; in other words, on the degree of utility that the particular commodity may possess for them. This proposition does not throw any great light

on the explanation of phenomena, but it has the advantage of including some rather complex ideas in a short and simple formula. Nothing more than this must be sought from it. People have discredited it just through ascribing to it a precision it does not admit of.

For example, it has been erroneously expressed in the following mathematical formula: "Value varies in direct ratio of the quantities demanded, and in inverse ratio of the quantities offered."

This means to say, that if the demand is doubled, then, the supply remaining the same, the value will be doubled; and that, inversely, if the supply is doubled, then, the demand remaining the same, the value will be reduced by half. In such terms as these, the proposition is absolutely false, as was long ago proved by John Stuart Mill and by Cournot.

People forget that though supply and demand act on value, yet value, in its turn, *reacts* on supply and demand, and tends to re-establish that equilibrium between them which had been momentarily disturbed. When demand exceeds supply, value certainly rises; but the very result of this rise in value is to reduce demand from the side of the buyers, and to increase supply from the sellers; so that the quantities supplied and demanded are not long in regaining their equality. The simplest observation is enough to prove this. Let us take some stock on the Bourse, — say the three per cents, — and let it be at 95. Continually a certain quantity of government stock is offered, and a certain quantity demanded. At the opening of the Bourse, suppose the stock demanded to be double the figure offered. Who would be so foolish as to imagine that the price of the stock ought consequently to be doubled, and rise to 190? Yet that is precisely what ought to occur if the above formula was correct; but in reality the price of the stock may not rise in the least, and that for the very simple reason that by far the larger number of the would-be purchasers at 95 withdraw when the price rises. It is clear that if the amount of stock demanded diminishes in proportion to the rise in price, at the same time, and for the same reason, the amount offered

increases. A moment, then, will necessarily come when the decreasing demand and the growing supply will become equalized; and at that moment equilibrium will be re-established. A rise of a few pence is generally sufficient to bring about this result.

Inversely, it is not impossible, in certain exceptional cases, for supply and demand to entail far more than proportional variation in value. *Gregory King's Law*, established two centuries ago by numerous observations on the price of corn in England, showed that the slightest variation in quantity caused more than proportional variations in price. Thus, if the crop was diminished by half, the price per bushel was multiplied almost by five.

However, this law has now lost almost all its importance, in consequence of international trade in cereals. We have to remark, indeed, that, thanks to that system of exchange which brings together in one market the produce of countries situated on all the zones, not only is the bad harvest of one land compensated for by the good harvest of another, but also the production of corn, instead of being intermittent, becomes continuous; for there is not a day in the year, so to speak, on which harvesting is not going on in some portion of the globe.

V. The Effects produced on Value by Competition.

When each individual in a country is at liberty to take the action he considers the most advantageous for himself, whether as regards the choice of an employment or the disposal of his goods, we are said to live under the *régime* of *competition*.

This *régime*, under which at the present day nearly all civilized societies live, exercises a decisive influence on all economic phenomena, and especially on value.

As far as regards value, competition has the following effects: —

Firstly, It tends to equalize the values of all similar products.

Desires and wants being different in the case of each man, it would follow that the same object ought to have a particular value for each individual; that, for instance, in a corn market there

ought to be as many different prices as there are buyers. But competition prevents the accomplishment of such a result; in reality, in our corn market there will be only one price for all the sacks of corn. Why? Because if a particular one of the buyers chanced to offer for a particular sack a price higher than that current in the market, all the sellers would hasten to offer him their sacks at a lower price, and would compete with one another till the price had fallen down again to the general level. Inversely, if a seller agreed to dispose of his sack below the market price, all the buyers would press round him and outbid one another, till the price had been forced up again to the general level. Stanley Jevons calls this law, which states that there is never but one price for objects of the same quality, the law of *indifference*. By this he means that all the objects being, according to the hypothesis, of the same quality, buyers have no motive for preferring some to others, and that in this state of indifference the slightest variation in value is enough to provoke outbiddings in one direction or the other, which would restore the equilibrium.

Secondly, It tends to restore the value of all products to a minimum level, determined by the cost of production.

When we come to production, we shall see, that to produce any article of wealth a certain quantity of wealth must necessarily be consumed. The value of the wealth produced is as a general rule higher than that of the wealth consumed; for, if it were otherwise, the producer would incur a loss. Unless, then, the unexpected comes to pass, there will always be a difference, or a margin, between the two values; and it is this very difference which constitutes the profits of the enterprise.

It is clearly to the interest of the producer to extend this margin as much as possible, by trying either to lower the value of the wealth consumed (raw material, wages, etc.), or to raise the value of the wealth produced. But the competition of the producers acts in just the inverse direction; the buyers, vying with one another, each producer strives to attract them to him by reducing as much as possible the margin between the cost price and the

selling price, until that minimum limit is reached beneath which it would be no longer worth while to produce. There is a widespread notion that the cost of production and value stand to one another in the relation of cause and effect; in other words, that things possess a value on account of their particular cost of production, and that this value is always determined by this cost of production. This is altogether a sophism.

True enough, under the action of that external cause which is called competition, value and cost of production bear a constant relation one to the other; but it is not correct to say that cost of production determines the value of the product. On the contrary, it would be more correct to say that *it is the value of the product which determines the cost of production.* Before incurring any expenses in the production of a thing, every producer first asks himself, "What will be the value of the product?" If he considers that this value will be enough to cover the expenses and leave him a margin of profit besides, he ventures on the enterprise. In the opposite case, he refrains.

If he happens to err in his predictions, it will be so much the worse for him; and all the expenses he may have incurred will not be able to raise the value of the product a farthing above the value determined by the law of supply and demand.

Moreover, it is a *petitio principii* to say that the cost of production is the cause of the value of things. For, as the cost of production is, as we have seen, nothing but the value of the wealth consumed in the course of production, such a train of argument would merely explain value *by* value.

The cost of production may greatly vary, not only, as is obvious, for different products, but also for products of the same sort. From the latter circumstance arises an economic problem which is sufficiently remarkable, and the solution of which is extremely important.

Let us consider some hundreds of sacks of corn offered for sale in a market. It is evident that they have not all been produced under identical conditions. Some have been raised by

means of manuring and labor; others have grown almost spontaneously on fertile soil. These hail from San Francisco, and have doubled Cape Horn on their way; those come from the next farm. If, then, each sack was to have fixed on a ticket its own peculiar cost price, there would, perhaps, not be two on which the same price could be read.

Let us suppose, for instance, that these cost prices ranged from 10 to 20 shillings.

Under these conditions what will be the market price? will it be equal to the cost price of the sack which cost the most, or of that which cost the least, or of some intermediate sack? Will it be fixed at 20 or 10 or 15 shillings? In other words, will the value, on this hypothesis, be regulated by the *maximum* cost of production, or by the *minimum*, or by the *average?* Here we must draw distinctions.

If we are speaking of products which cannot be multiplied at will, or only in a very restricted measure, — and this is just what occurs with corn, — the market price will have to be regulated by the cost price of the sack which has been the most expensive to produce, 20 shillings in our example; that is to say, the value is regulated by the maximum cost of production. For if we suppose, as we are bound to do, that all the sacks in the market are absolutely necessary for the food-supply, and that none of them can be dispensed with, we shall certainly have to make up our minds to pay a price high enough for none of these sacks to have been produced at a loss; for if any one of them was so circumstanced, its production would be discontinued, and thence there would be a deficit in the supply of corn.

If, on the other hand, we are speaking of products which can be actually or virtually multiplied at will, — *e.g.* yards of cotton-stuff, or hundreds of nails, — the market price would probably fall, if not all at once, at any rate after a short time, to the level of the lowest cost price; that is to say, the value tends to be regulated by the minimum cost of production. In fact, it will be to the interest of the producer whose cost price is the lowest to profit

by his privileged position to lower his prices to a limit very near to his cost price, in order to undersell his competitors and extend his sale as much as possible. If he happens to be of sufficient weight to supply the market by himself alone, his less-favored rivals will have nothing to do but disappear: there is no further need of them.

To recapitulate: Whenever we are dealing with a product which cannot be multiplied at will, it is the maximum cost of production which determines the market value.

Whenever we are dealing with a product which can be multiplied at will, it is the minimum cost of production which determines the market value.[1]

VI. Whether Competition is Cheapness.

There is a very wide-spread notion that competition always produces cheapness, and monopoly dearness. Thus, competition is considered by the public to be a power which is beneficent, democratic, and always conducing to the general welfare, whereas monopoly is regarded as a public scourge. Many people even think that all political economy can be reduced to this axiom. Yet it is not an absolute truth.

Undoubtedly the ordinary effect of competition, as we have seen in the preceding chapter, is to lower the value of products to the level of the cost of production, which is advantageous for the public.

But competition, after passing a certain limit, may produce a precisely inverse effect. If it raises up a number of producers or middlemen out of proportion to men's wants, — *e.g.* two or three railway lines where one would have sufficed, or a hundred bakers in a town which was previously content with ten, — then the general expenses increase in considerable proportions; that is to say,

[1] *i.e.* if (after what our author has said on page 66) it is right to say that cost determines value at all. — J. B.

each single article produced requires for its production a larger consumption of wealth (in the shape of wages, raw material, implements, sites, etc.), and, the cost of production rising, the value of the product rises in a parallel manner.[1]

This does not mean that competition does not bring about here, too, its usual effect of maintaining the value of the product at the level of the cost of production, by reducing profits. On our present hypothesis, producers are only too well aware that their profits are reduced to the minimum; but the reduction of profits, instead of resulting from a fall in the selling price, which would be advantageous for the public, comes from a rise in the cost price which is detrimental to all concerned. (For the inconveniences of a multiplicity of middlemen, see below, "Traders," page 176).

If competition does not necessarily lead to cheapness, it follows, *a contrario*, that monopoly does not necessarily produce dearness. It has the disadvantage, it is true, of allowing the producer who is invested with this particular monopoly to realize exceptional profits, but it may enable him, also, to reduce his prices, through economy in his general expenses; thus a trifling disadvantage would be compensated by a great advantage. The equalization of incomes is certainly a good thing to aim at, but economy in production is better.

Observe, too, that it is altogether erroneous to imagine that a producer who possesses a monopoly has the power of fixing prices according to his own will, and that the public must submit to his good pleasure. In reality, the value of his products is determined by the same laws as every other value, *i.e.* by the demand of the public. As this demand, in obedience to a constant economic law, grows in direct ratio to the lowering of prices, it is for the most part the monopolist's interest to fix his prices at a very low figure, and as near as possible to the cost price, in order to attain the greatest possible sale. Such a course is usually pursued by

[1] Even with the explanation which follows, this position seems paradoxical, and the views of Value not quite consistent with that of Sect. IV. and V. — J. B.

intelligent producers who hold a monopoly either *de jure* or *de facto*. To sell cheaply in order to sell largely, and thus recoup yourself from the quantity sold, has become the favorite motto of present-day commerce. (For this question of *monopoly* read Cournot's remarkable chapters, either in his *Principes mathématiques de la théorie des richesses* or in his *Revue Sommaire des doctrines économiques*, 1877.)

Finally, it must not be forgotten that in certain special cases, — notably, every time a monopoly is established by law, — the law can fix tariffs; and thus are obtained the advantages of large production, while the disadvantages of excessive profits are avoided. This is done when the working of railway lines is granted to one or more privileged companies; and the results of such a system are often far superior to those afforded by competition.

Thus it is very clear that the tendency of modern industry is not towards competition, but towards monopoly, a real monopoly which is exercised by powerful companies, which may either work on their own lines, or form part of a syndicate. Trade, transport, manufacture, mines, are becoming concentrated in the hands of large associations, which are in their turn showing a tendency to federate as associations of the second degree. Of late years these have become well known as *Cartels*, "Trusts," "Rings," and so forth. As a rule they are not favorably regarded by the public or by respective governments, and they are often stigmatized as monopolists. This severe judgment is well merited when their only object is avowed speculation, but as a new form of industrial organization they may be of great use by preventing a waste of productive power, by making production more regular, by keeping up prices, and thus warding off crises and enforced lack of work. Still their action will render even more necessary a certain amount of State interference. We may refer to Professor Foxwell's article on *Monopolies* in the *Revue d'économie politique* for 1889.[1] There

[1] 'Growth of Monopoly,' a paper read to the Economic Section of the British Association, 7th Sept., 1888, and translated in the September number of the *Revue d'économie politique* (1889), of which Professor Gide is an editor. — J. B.

is also a tendency to monopolies exercised directly by the State, as in the case of the post-office, telegraphs, railways, banks of issue, and by municipalities in the matters of gas and the electric light, omnibuses, and tramways.

CHAPTER III.

PRICE.

I. How Value is measured by Exchange.

Many economists hold it to be an indisputable principle that the idea of value cannot be conceived apart from exchange (Stanley Jevons even proposes to suppress the term "value," and to replace it by "ratio of exchange").

Our analysis, on the contrary, proves that the idea of value precedes exchange, both in order of time and in order of importance. The idea of value means nothing more than a preference granted one thing over another, a comparison, the weighing of two desires. The idea, then, is not necessarily bound up with exchange. Robinson Crusoe had his preferences, but I confess that they were in the latent state, and that the conditions of his isolated existence were not suitable to reveal them to others, or even to himself. If he had been asked to point them out, and to class the articles of wealth composing his modest property according to the values he ascribed to them, he would have found the task embarrassing. At the most, he would have been able to class them roughly in two or three groups, according as they corresponded to more or less essential wants. Yet we can imagine some occasion which might cause this confused and indistinct notion of value to rise suddenly out of his inner consciousness, and compel it to take a definite shape. Such an occasion, for instance, arose even in the first few days after his landing. When he had to rescue each article of wealth singly from the ship, which was on the point of sinking (for the storm did not leave him time to save all, but only enough to rescue some of them), he must have been obliged to make a choice and determine which one he preferred to save first. The order in

which he successively brought them to land, perfectly showed the order of his preferences, and consequently, too, the respective values he ascribed to them.

Let us confess that in reality it is almost solely exchange which causes the idea of value to rise from the inner consciousness in which, so to speak, it was slumbering, which determines it and measures it. In every exchange, and in present-day societies exchanges are innumerable, two articles of wealth are laid side by side, and each exchanger weighs in his mind the article he must give up and the article he desires to acquire. Though this is not the place for us to discuss exchange, — for we shall find it later on in dealing with the organization of production of which it is one of the principal springs, — yet we ought to show in what way exchange determines and measures value. As we know, the value of a thing is nothing but the more or less keen desire with which it inspires us. But it may be asked, How are desires to be measured? Just like any other force, — by their effects. Now we know that each party to an exchange is called upon to make some sacrifice for the satisfaction of his desire; he must give up a certain quantity of the wealth he possesses in order to attain what he covets. Clearly, the extent of the sacrifice he is disposed to make can serve to measure the intensity of his desire. The exchange of ten sheep for one ox proves that men, for one reason or another, consider an ox to be ten times more desirable than a sheep.

The keener the desire with which an object inspires us, the more distant will be the limit at which we shall consent to part with it. The higher the place it holds in the order of our preferences, the greater will be the quantity of any other article that must be offered us in order to arouse in our minds a desire opposite in direction and equal in intensity, and to make the scale turn to the side of the latter desire. The expression, then, is perfectly correct, that "the value of a thing is determined by the quantity of other things for which it can be exchanged"; or, more briefly, that the value of a thing is determined by its purchasing power. But we must not say, as is too often done, that it is the purchas-

ing power which constitutes value. Value is constituted by our preferences alone. The purchasing power is only an effect of value, just as the power of attraction of an electro-magnet is merely the effect of the current which penetrates it.

If, then, in exchange for an ox I can have 8, 10, or 12 sheep, I can say that the value of an ox is 8, 10, or 12 times greater than that of a sheep; or, inversely, that the value of a sheep is 8, 10, or 12 times smaller than that of an ox. This can be expressed thus: "The respective values of any two commodities are in inverse ratio to the quantities exchanged." The more of a thing that has to be given up, the less is it worth; the less of it that has to be given in exchange for another thing, the more is it worth. It is just as in weighing. When the balance is in equilibrium, the weights of the objects can be said to be in inverse ratio to the quantities weighed. If we have to put ten sheep into one scale to balance one ox in the other, that is because the weight of a sheep is only the tenth of the weight of an ox.

II. On the Choice of a Common Measure of Values.

To obtain a clear idea of size, weight, value, and all other quantitative notions, it is not enough to compare objects two at a time, as we have just done; we must compare all things with one specific object, which shall always be the same; we need one single term of comparison; in a word, we require a *common measure*. For measuring lengths, the term of comparison chosen has been some part of the human body, such as a foot, a thumb (inch), or a forearm's length (cubit), or a specific fraction of the circumference of the globe. For measuring weights, the term of comparison chosen in the metric system has been a fixed weight of distilled water. For measuring value we must certainly take as our term of comparison the value of some object or other; but which are we to choose?

It is a remarkable fact that nations have almost unanimously agreed in choosing as their measure of values, as their standard,

the value of the precious metals, gold, silver, copper, but especially those of the first two. They have all made use of a little ingot of gold or silver, to which they have given the name of franc, pound sterling, mark, dollar, rouble, etc. For measuring the value of any object it is compared with the value of that small weight of gold or silver which serves as the unit of money; that is to say, we try to find how many of these tiny ingots must be given up for us to acquire the commodity in question. If, for instance, ten are needed, we say that the commodity is worth ten francs, or ten dollars, etc.

Why have the precious metals been taken as the common measure of values? Because, as they had already been chosen, on account of some remarkable properties, to act as *instruments of exchange* (for the reasons which have caused the precious metals to be chosen as instruments of exchange, see pages 186–187), and as exchange is, as we have shown, the very transaction which serves to measure values, the precious metals were naturally marked out to fulfil this high function. Yet these two functions, although always confounded in practice, are theoretically quite distinct, and could, indeed, if we wished, be perfectly well separated (see Stanley Jevons on *Money*). For instance, the collectivists, in the social organization which they are sketching out, propose to suppress exchange and consequently the instrument of exchange, but they never dream of suppressing the measure of values; on the contrary, they propose a certain measure of values which would consist of labor notes. Inasmuch as these two functions of money are perfectly distinct, we have thought it right to discuss them in two different parts of this work, and, though we have been blamed for this separation, we have thought it right to retain it as a perfectly logical one.

However, it is right to recognize that though the precious metals are far better suited, by their natural properties, to serve as instruments of exchange than as a measure of values, yet they possess two special properties which enable them to fulfil this

second function in a manner which, if not perfect, is at least superior to the use of any other imaginable measure of value.

These two properties are, firstly, their very great *facility of transport;* secondly, their almost indefinite *durability*. Thanks to the first of these two properties, the value of the precious metals is, of all values, that which fluctuates least from place to place; thanks to the second, that which fluctuates least from year to year. It is this double invariability (relatively speaking) in *space* and in *time* which is the essential condition of every common measure.

If the difficulty of transport could be altogether overcome in the case of any one commodity, and if the gift of ubiquity could be granted it, the result would be that its value would be practically the same in all places. Let its value be supposed to be less high in one part of the world than in another; then men would soon come to seek it at this first place in order to transport it to the second; and, as by our hypothesis, the carriage would present no difficulty and require no expense, the slightest difference in value would be enough to make the enterprise a profitable one. The equilibrium, if we suppose it to have been broken, would then be instantaneously re-established, just as the level is instantly restored in the case of a liquid whose molecules are perfectly fluid.

Now, the precious metals being of all commodities, except precious stones, those which have the greatest value in the smallest volume, they are also those whose carriage is the easiest, and whose value, therefore, will the most rapidly recover its normal level. For one per cent of its value, freight and insurance included, a mass of gold or of silver can be conveyed from one end of the world to the other, whilst the same weight of corn would have to pay, according to circumstances, 20, 30, or even 50 per cent of its value. It might seem to follow from this, that save for this one per cent, the value of the precious metals would be the same in all parts of the world: yet such a conclusion would be considerably too broad; for it is certain that the value

of the precious metals is not the same everywhere, and that in particular it is more depreciated in the places where they are found and worked, *i.e.* in mining countries (a fact that explains the very high prices prevalent in those districts) ; nevertheless we may say that the value of these metals satisfies well enough the first condition, viz., invariability in space.

It complies far less satisfactorily with the second condition, invariability in time ; yet even from this point of view the precious metals are superior to most other commodities for the second reason we have given, namely, their very great durability.

The principal cause of the value of an object fluctuating from one epoch to another is the variation in its quantity. If we imagine a product to be of such a nature that its quantity is liable to vary from zero up to a very considerable figure, the variations in its value will be extreme. This is the case with corn. Before harvest the granaries may be absolutely empty ; after harvest, they will be full, and the difference between a good and a bad year may be immense. Hence, too, there are enormous variations in the value of this article, and they would be still greater, were it not that facility of carriage and international trade brought about a sort of equilibrium in production (see above, page 64). But because of their durability, which enables the same particles of metal, coined and recoined over and over again, to pass down the ages, the precious metals possess quite other characteristics. They accumulate little by little into a huge mass, into which the annual production pours as if into a reservoir which is continuously growing, and in which, therefore, accidental fluctuations become of smaller and smaller proportionate amount and importance.

In a headlong torrent the slightest increases in volume are manifested by enormous changes of level, but the level of Lake Geneva is only raised in imperceptible proportions even by the greatest swellings of the Rhone. The same holds with values. Let the corn crop for one particular year be doubled throughout the whole world. Then, as the stock is likewise doubled, the

depreciation in prices will be terrible. But let the output of gold or silver mines happen to double during one year; then, as this output does not, at the most, represent more than two or three per cent of the existing stock, the effect produced will be but trifling.

Yet these variations end by being very perceptible in the long run; for at the rate of two or three per cent per annum, the stock would become doubled in twenty-four or thirty-six years. If, then, the value of the precious metals offers substantial enough guarantees of stability in time, when short periods only are under consideration, it altogether fails in this respect when long periods of time are included, say twenty or twenty-five years, not to speak of several centuries. In this regard, then, our proposed measure of value is extremely defective.

Could a better one be found? Well, several have been proposed as such. Here are a few of the most noteworthy: *the value of corn*, or *the wages for a day's labor;* again, in quite another order of thought, it has been proposed to measure the value of things by *the number of hours of labor necessary for their production*. Let us discuss the respective merits of each of these.

Firstly, the value of corn. On first thoughts this is a most astonishing choice; for if we consider the value of this commodity in different places or at different times, we find not only that it is not invariable, but also that there are few values whose fluctuations are more marked. At the same moment a bushel of corn may be sold for £3 10*s*. in France, and for £1 or 30 shillings in some of the Western States of America. According as the year is good or bad, the value of corn may also vary in enormous proportions, though these variations may have been diminished by the facility of exchange.

But it is replied that, though the value of corn is incomparably more variable than that of the precious metals, when only short spaces of time are considered, yet it far more stable when we extend our observation to long periods. Throughout its sharp and numerous oscillations the value of corn would appear

to tend always to remain equal to itself; and these would seem to be the reasons for such a curious property.

1. Say its supporters, the utility of corn may be regarded as constant; for, on the average, does not a man always require the same quantity of corn as food, to-day as yesterday, to-morrow as to-day? Corn, then, answers to a want which is constant and always equal to itself, provided that man's physical constitution does not undergo radical modifications. Again, its scarcity, that is to say, the relation between the quantity produced and the quantity demanded, should equally be regarded as constant from one century to another. That quantity of corn is and will always be produced which is necessary to support the inhabitants of a country; for beneath that limit they would die of hunger: but no greater quantity will be produced, for above that limit it would be superfluous, and superabundance would entail an immense depreciation. No doubt this equilibrium may be disturbed by the vicissitudes of the seasons, but the more violent the displacement, the stronger is its tendency to recovery.

Now if utility and scarcity, the two essential elements of the value of corn, as of every other value, can be regarded as constants, the value of corn itself might be regarded as a fixed point whence we might measure all other values.

Unfortunately, these are mere abstractions. It is not a fact that men nowadays eat the same quantity of corn as their forefathers did, at least, if we speak of wheat; nay, they eat far more; for in the last century they mainly lived on cereals of inferior quality. On the other hand, it is possible that in the future, if the consumption of meat or vegetables increases, the consumption of corn may decrease. Even admitting that the utility of corn might remain constant, there would still be an element in its value which would continue to be variable; namely, the greater or less ease with which we obtain it, whether directly by means of agriculture, or indirectly through international trade.

Nevertheless, from the point of view of its fluctuations in value, corn certainly possesses qualities and defects which are exactly

inverse to those characteristic of the precious metals. For this reason it may be used, side by side with them, as a valuable enough means of checking them.

2. *The value of a day's labor, choosing the least remunerative labor.* This theory rests on a double idea: on the one hand, that the essential and indispensable wants of human existence are the same for each man; on the other, that in every society there is a certain class of men who from their wages can only just provide for these primal necessaries of life (see Book IV, "The Law of Brass"). If these elementary wants represent a "constant," the least amount of wages required to satisfy them should also represent a constant value.

But this hypothesis is even more chimerical than the preceding one. In the first place, it is not absolutely proved that in every society there is inevitably a part of the population which is reduced to the bare necessaries of life; in any case it is clear that these bare necessaries are not the same for the serf of the twelfth century as for the French peasant of to-day, the same for the American laborer as for the Chinese coolie. The one would live and have enough to spare on what would but leave the other to die of hunger.

3. *The quantity of labor.* This doctrine, which was set forth by Adam Smith and Ricardo, has been powerfully developed by Karl Marx.

We must not confound this theory with the preceding one, as too many economists have done, with Adam Smith, perhaps, at their head. It is one thing to take as the measure of the value of objects the *value of labor*, the price of manual labor, wages, in a word, the proposal we were discussing just above. It is quite another thing to take as the measure of their value the *quantity of labor*, the pains taken in producing them, as is the proposal now before us.

The originality of this theory lies in its attempting to measure values not by another value, but by a quantity of quite a different order; this method, then, is radically different from those we

have heretofore considered. Its principle is, that between the value of any object and the quantity of labor devoted to its production there is a constant relation, so that the one can be measured by the other. If, then, we ask how are we to measure the quantity of labor itself, the reply is: By its duration, by the number of days or hours devoted on an average to this particular labor. Thus we light on a very simple common measure.

This theory is naturally connected with the doctrine which regards labor as the cause of value, a doctrine we have already rejected. But still the present theory is not, as is generally believed, a necessary consequence of the former doctrine. While rejecting the idea that labor is the cause of value, we might still allow that it can serve as its measure. The theory requires the following modifications.

It can correctly be asserted that men take the more pains in producing an object they desire the more; in other words, that they attribute to it a higher value. Just as up to the present we have measured the value of things by the sacrifice a person is willing to make for their obtainal, *i.e.* by the amount of money given up by the buyer; so, too, we can measure it (value) by the sacrifice of their time and trouble men are willing to make for their production. In this sense Adam Smith's fine saying can be accepted, — "Labor was the first price, the original purchase-money, that was paid for all things." — *Wealth of Nations*, I, v, 14. On this theory, then, labor appears to us no longer as the cause, but, on the contrary, as the *effect* of value, or rather of that desire which constitutes value. Now, once admitting that labor is an effect of value, nothing could be more scientific than the measuring of a cause by its effects. Heat is measured by the expansion of bodies, starting from the principle that each increase in length of the thermometric column must be proportional to each increase in temperature. Why not grant likewise that the amounts of labor are proportional to the respective natures of the articles?

Yet this theory will always encounter two difficulties: firstly, that the amount of labor, the amount of trouble taken, is but

very imperfectly measured by the time occupied; secondly, that even granting that the amount of labor might be gauged by its duration, we should still be without any practical means of calculating the average amount of time necessary for the production of any one article of wealth. (For the development of this objection, see in Book IV the chapter "The Different Formulæ for the Division of Wealth.")

III. What is Price?

The value of a thing can be expressed in a thousand different ways. Homer says that Diomede's armor was worth a hundred oxen. A Japanese would have said, a few years ago, that it was worth so many hundredweight of rice; an African negro, so many yards of cotton stuffs; a Canadian trapper, so many fox or otter skins; a Frenchman or an American of the nineteenth century will say it is worth so many francs or dollars. Each of these expressions indicates in its way a measure of value; but the last only, which measures the value of a thing by the value of a certain quantity of pieces of gold or silver, bears the name of *price*.

The price of an object, then, is the expression of the relation which exists between the value of that object and the value of a certain weight of gold or silver, or more briefly, *its value expressed in terms of money;* and as in every civilized country money is the only measure of values, the word "price" has become synonymous with the word "value." Indeed, it is the only expression for value that we actually employ, though theoretically we may use a host of others. In the same way, for measuring lengths we never speak except of yards, etc., although we may just as well express a particular length by comparing it with a man's size, the height of a tree, or any other length.

Nevertheless, we must not altogether confound price and value, as is popularly done, and believe, for instance, that because the price of a thing is the same in two different places its value must necessarily be the same; or, inversely, believe that because the

price of a thing has varied, its value must necessarily have varied in the same proportion. That might be a gross blunder.

If we suppose that the value of the precious metals has not remained the same from yesterday up to to-day, it is clear that the value of every object measured by means of these precious metals will be found to have altered; that is to say, its price will have varied, and that in inverse ratio to the fluctuations in value of the precious metals.

If the length of a metre, or rather the length of the earth's circumference of which the metre is but a subdivision, were through some startling phenomenon reduced by a tenth, is it not clear that all objects measured by us henceforward would appear to be one-tenth longer or higher? Yet no such change would have occurred; it would be merely an illusion produced by the shortening of the unit of measure. Similarly, if money, or, rather, the precious metals which constitute it, happened to lose about a tenth of their value in consequence of some far less extraordinary phenomenon, say their superabundance, it is clear that the price of all objects, that is to say, their value expressed in money, would seem to us to have risen by a tenth.

We can therefore lay down the following formula: "every variation in the value of money involves an inversely proportional variation in prices." Would the reciprocal be equally true, and might we say that every variation in prices presupposes an inverse variation in the value of money? Our answer is, "Yes, if the variation in prices is absolutely general; no, if it is not so." In the latter case the variation in the prices of certain objects evidently depends on causes peculiar to these objects. Now as the principal factor which influences the value of money is the greater or less quantity of money in the shape of coin, a second formula can be laid down, which, however, is not so absolutely true as the first one, — "every variation in the quantity of money involves a directly proportional variation in prices." Thus if the quantity of money in a country happens to double, it is probable that, other things being equal, prices will rise considerably, though it would

be rash to say that they will double. We admit that this second formula is not absolutely true, for quantity is not the only factor which influences the value of money. The development of commerce, the increase in population, the substitution of instruments of credit for metallic money, may act in different ways on the utility of money, and consequently on its value, irrespective of any variation in its quantity. (See M. Milet's article "un aphorisme orthodoxe, mais inexact sur la monnaie" in the *Revue d'Economie politique*, March–April, 1890.)

IV. Whether the Measure of Value be not an Insoluble Problem.

The function of a common measure is to enable us to compare objects situated in different places, and therefore incapable of a direct comparison, or to compare the same object at different points of time and ascertain whether it has varied, and, if so, in what proportions. By the use of the yard-measure I am able to compare the stature of Lapps with that of Patagonians, and to measure exactly how much taller the latter are than the former. If the yard-measure is in use, or even known, some million years hence, it would enable me to compare man of that date with man as he is to-day, and to ascertain whether he has degenerated in stature.

But it is clear that our conclusions will be accurate only so long as we are certain that the length of the yard-measure used as our standard is exactly the same in Lapland and in Patagonia, and that a thousand years hence it will be just what it is to-day. Invariability of the magnitude chosen as a common measure, invariability in space and in time, appears then to be an indispensable condition; or, at any rate, if this magnitude varies, we must be able to determine, and consequently to correct, these variations.

We require the same utility from a common measure of values; that is to say, from money. By its aid we wish to be able to compare the values of commodities situated in different places, or to

compare the value of one particular commodity at different times. Is it not of great interest to a corn-merchant to know whether corn has a higher value in France than in Russia, if he has more this year than he had last year? But of what use would our calculations be, if the value of the commodity we take as our unit (*i.e.* the value of money) was not the same in Russia as in France, not the same this year as last year? Is it not, then, necessary for the value of money, also, to satisfy the condition indispensable for every common measure, — namely, invariability in space and in time?

Now we know from our previous explanation that the value of each thing varies, and that of the precious metals likewise, although in smaller proportions than in the case with the others. Thus the attempt to discover a measure of values would seem to be an insoluble, nay, contradictory problem, a very squaring of the circle for political economy; this, in truth, is the almost unanimous opinion of economists.

Yet we cannot join them. It is true that we must abandon the hope of finding an invariable unit of measure, but this condition is not absolutely indispensable.

In no sphere of work, in fact, have men been able to discover a rigorously invariable standard. Even the metre [3.280 feet] of platinum and iridium, which was cast with great trouble and at great expense at the *Conservatoire des Arts et Métiers* to serve as standard for all countries which have adopted the metric system, even this varies in length for each degree of temperature. But the coefficient of expansion is known and the necessary rectifications are made. The litre [1.760 pints] of distilled water, which serves as unit of measure for weight, under the name of kilogramme [2.204 pounds avoirdupois], has really a weight which varies for each degree of latitude or each yard of altitude. But we know the law of these variations and can reckon for them.

In the same way we should care little for our type of value varying, *if only we could discover and determine those variations:* that once accomplished, nothing would be easier than the making of the necessary corrections.

The whole question, then, resolves itself into this: can we discover and determine these fluctuations?

Let us suppose that to-day a list was to be carefully prepared of the price of all commodities, not one being omitted. Ten or a hundred years hence let a new list of prices be compiled; if on comparing this with the former one it be found that all prices, without exception, have increased fifty per cent, on such an hypothesis we can affirm that the value of money has actually fallen thirty-three per cent. For henceforward everything that used to cost two shillings costs three; that is to say, three shillings are only worth what two used to be, and therefore money as coin has lost a third of its value.

But it may be asked, what authorizes us to draw such a conclusion?

The following line of argument: Such a phenomenon as a general and uniform rise of prices permits of but two possible explanations: we can admit — either that things are what they seem to be, *i.e.* that all commodities have undergone an upward movement, which is both universal and identical; — or that the value of one thing only, say money, has been subjected to a downward movement, no change whatsoever having occurred in the value of all other commodities. Which of these explanations are we to choose? Common sense does not allow a moment's hesitation. In proportion to the simplicity and ease of the second explanation is the improbability of the first, in consequence of the marvellous combination of circumstances which it requires. How are we to conceive a cause capable of acting simultaneously and equally on the value of the most dissimilar objects, as regards their utility, their quantity, and their mode of production? How imagine a cause able to raise at exactly the same time and in precisely identical proportions, the value of silk and of coal, of corn and of diamonds, of lace and of wines, of land and of manual labor, and of all other things which are not bound up with one another, and in fact are absolutely independent? The choice of such an explanation would be just as irrational as to hold that the

motion of the stars is better explained by the system of Ptolemy than by that of Copernicus. This movement may be interpreted in two ways, either by the displacement of the entire heavenly vault from east to west; or, perfectly easily, by the displacement of our earth in the contrary direction. Now, in spite of the lack of any direct proof, we do not doubt for a moment which is the preferable and real explanation. It is absurd to imagine that heavenly bodies, so different in nature, and so enormously distant from one another as the sun, moon, planets, bright stars, and nebulous stars, could execute such a movement, preserving their respective places and mutual distances as if they were soldiers on parade. An identical line of argument must be used to account for the upward movement of prices; it can be rationally understood only as a sort of optical illusion; it is an apparent movement caused by the actual and inverse movement of money, which discloses it to us and measures it at one and the same time (see Cournot, *op. cit.*).

In reality, the circumstances are not so simple as we have supposed them to be for the sake of argument. An absolutely general and uniform rise of prices will never be shown to occur; as the value of each individual object depends on its particular causes of variation, we shall only find that certain prices have risen, but in very different proportions; that others have remained stationary, and that some have even fallen.

Yet if skilfully managed calculations could strike a general average, say a rise of ten per cent, this could only be explained, for the reasons given above, by an equal (and inverse) fall in the value of money.

This may be paralleled by another analogy borrowed from astronomy. The stars, which are inaccurately termed fixed stars, have been discovered, in reality, to change their positions in very divergent directions. Yet astronomers believe they have discovered a mean alteration of all these movements towards a specific point in the sky. No other way of accounting for this general movement has been found, than that it should be regarded as an optical illusion, produced by a slipping movement of our solar

system towards an exactly opposite point. An attempt has even been made to measure this latter movement.

We can now easily understand how variations of the standard could be calculated from variations in prices, and how tables of these fluctuations could be published at fixed times, to serve as an official guide for the correction of the errors which arise from the use of money as the measure of values; thus debtors who had borrowed a hundred pounds might be discharged from their obligations on the payment of only ninety, or inversely might be compelled to pay one hundred and ten, according as the computation showed a rise or a fall of ten per cent in the value of money. Similar tables of reference have been previously proposed in 1822 by Lowe, in 1833 by Scrope. (See JEVONS on *Money*, page 328.)

V. Whether Money should be reckoned as Wealth.

Popular opinion would give a ready answer to this question. Always — we might almost add everywhere — men have given money a quite exceptional place in their thoughts and desires. They have regarded it, if not as the only wealth, as at any rate by far the most important, and, truth to tell, they appear to esteem all other wealth only in proportion to the quantity of money that can be acquired for it. The value a tradesman places on his goods in taking stock of his wealth means nothing, so long as they are not realized (as he would express it); that is to say, are not sold. Thus, in his opinion, wealth goes for nothing except when it exists in the shape of coin. For a man to be rich, he must possess either money or the means of obtaining it.

It would be interesting to trace through history the various shapes taken by this idea which confounds gold with wealth. There were the attempts of the mediæval alchemists to transmute all metals into gold and thereby accomplish what they termed the *magnum opus*, which would have been far less a chemical discovery than an economic revolution. There was the enthusiasm kindled in the Old World on the arrival of the first galleons

from America, convincing men that in fabled Eldorado an end would be found for all miseries. The same idea was manifested in the efforts made by governments to establish that ingenious "Mercantile System" that was to cause money to flow into the countries that had it not, and to prevent it quitting those lands which were possessed of it. Even to-day this old confusion is still extant; it is visible in the anxious care with which statesmen and financiers watch the goings-out and the comings-in of coin, as they appear to result from the balance between exports and imports.

But on turning to economists we shall receive quite another answer; for it was by a protest against this very idea, which it termed a prejudice, that political economy first manifested its existence. Political economy was but new born and was still stammering with Boisguillebert when it sent forth from his lips this utterance: "It is quite certain that money is not a good of itself, and its quantity does not create the opulence of a country." —*Economistes du XVIII^e siècle.* Edit. Guillaumin, Tome I, page 209. Since Boisguillebert's days every economist has regarded coin with absolute contempt, and has stated it to be a mere commodity like everything else, and even much inferior to any other article; for by itself it is incapable of satisfying any want or of affording us any enjoyment, and, indeed, is the only thing whose abundance and scarcity can be said to be matters of perfect indifference. If there are few pieces of money in a country, each one will have a greater purchasing power; if there are many, the purchasing power of each coin will be less. What does it matter to us?

These two opinions can be easily reconciled, however contradictory they may appear to be. The public, as usual, only takes the individual point of view, and is correct according to its own lights; the economists are right from the general point of view.

Every piece of money must be regarded as an "order" or ticket which is valid as regards the sum-total of existing wealth, and gives its holder the right of claiming as his own, and at his own choice,

any portion of this wealth, until the value of the coin has been reached. Moreover, as may be seen in MacLeod's works, this "order" possesses an advantage over credit papers, in that it carries its own security with it; for it is guaranteed by the value of the metal that composes the coin.

Naturally each one of us desires to have the greatest possible number of these orders, and the more we have, the richer we are. We know well enough that, in themselves, these orders can neither stay our hunger nor slake our thirst. We are not so stupid as to think that; and ages before economists had lighted on this truth, legend had taught it in its tale of King Midas dying of hunger while surrounded by wealth which his own folly had turned into gold. Yet even the contemplation of such a fate has not prevented us from regarding these "orders" as far more convenient than any other kind of wealth, and we are quite right in thinking so.

For, in society as it is, every one who desires to obtain an object he has not produced himself (and the immense majority of people are thus situated) can only obtain it by a double process: firstly, by exchanging the products of his labor, or his labor itself, for money — this is called "to sell"; secondly, by exchanging this money for the objects he desires — *i.e.* "to buy." The second of these processes, purchase, is very simple; by means of money a wished-for object is always easily obtained. The first process, sale, is infinitely more difficult; money is not always readily procurable for any article. Thus the possessor of money is in a far better position than the possessor of any other commodity: for the satisfaction of his wants the former has but one stage to clear, and that an easy one; the latter has two, and one of them, an awkward bit of ground, presents considerable difficulty. It has been well said that any article of wealth corresponds only to a *special and determinate want*, while money corresponds to *a general and universal want*. The owner of some commodity may not know what to do with it. The possessor of money will have no trouble of that kind; he will always find some one to take it from him. If by chance he is not able to make use of it at the moment, he has the handy

expedient of keeping it for a more favorable opportunity. Few other goods can be kept in that fashion.

But the possession of money carries with it what is perhaps an even greater advantage; for he who has money can make sure of being able to fulfil his engagements: no other wealth enjoys this remarkable quality; for in the eyes of the law, just as in the unwritten law of custom, money is regarded as the only means of discharging liabilities. There is no business man or manufacturer who does not always owe more or less considerable amounts. Now his having in stock goods worth more than the sum-total of his debts might be useless (and in cases of failures it sometimes happens, when all reckonings have been made, that the assets exceed the liabilities);[1] unless at the desired time he is able to get his signature honored by that particular form of wealth which we call "hard money," he is declared bankrupt. Is it surprising, then, that so great importance is attached to a commodity on the possession of which our credit and our honor may at any moment be dependent?

If we turn from the position of the individual man, and consider the whole mass of individuals who constitute society, the point of view changes, and there is more correctness in the economists' thesis that the amount of money in a country is a matter of indifference. It would be no use to me to have the amount that I hold multiplied by ten, if *the same thing happened for all the other members of society*. On that hypothesis I should be no richer; for wealth is purely relative, and I should not be able to obtain a larger measure of satisfaction than I previously had. For as there is no increase in the sum-total of wealth from which these "orders" are payable, each order will entitle me to a share, which is ten times less. In other words, the purchasing power of each coin will be ten times less; or again, all prices will be multiplied by ten, — and my position will be as it was.

However, in their *mutual relations*, countries, like individuals,

[1] In the crisis in the London Money Market, November, 1890, the great House most seriously affected is said at the time of its stoppage to have had assets exceeding its liabilities by no less than £4,000,000 sterling. — J. B.

gain by being well provided with money, but rather less, however. As exchange relations and credit transactions between countries are not so numerous as they are between individuals, money, whether as the instrument of purchase or of payment, is not so important a factor in such relations. Still, the increasing solidarity of the nations will tend to proportionally enhance the power of money in this field.

If we were to multiply by ten the amount of money in France, there would be no change in the respective position of Frenchman as against Frenchman (the increase being premised to be proportional for all) ; but France would not be on the same terms as regards foreign countries, and so obvious a fact is erroneously denied by economists in their struggle against the mercantile system. Their very abundance would cause pieces of money to be depreciated in France, but not elsewhere ; they would retain intact their purchasing power in foreign markets, and France might thus obtain an increase of satisfaction which would be in proportion to her increase of money. However, as we shall show when dealing with international trade, this privileged position could not last long.

The economists' dogma, that the quantity of money is a matter of indifference, does not become perfectly true till we not only extend our view over all individual men, and over all countries, but embrace in our observations the human race at large. We might then assert with absolute accuracy that the discovery of gold mines, a hundred times more valuable than those we are now cognizant of, would not benefit man in the least. Nay, we should rather be inconvenienced ; for, as gold would be worth no more than copper, we should be compelled to load our pockets with as cumbrous a form of money as that which Lycurgus sought to force upon the Lacedæmonians.

BOOK II.

PRODUCTION.

PART I. — THE CONDITIONS OF INDIVIDUAL PRODUCTION.

THE FACTORS OF PRODUCTION.

OUR first study will be the conditions of individual production, that is to say, such conditions as every man is subject to, even though he be alone in the world, like Robinson Crusoe on his island. After that we shall study the conditions of social production, the conditions experienced by men living in society, which only arise, or at any rate develop, with the progress of civilization.

Thanks to a tradition which has nowadays become altogether classical, production has three agents attributed to it, — *land*, *labor*, and *capital*. This threefold division possesses the advantages of simplicity and ease; its demerit is that it does not state what should be stated, and does state what should not be stated.

To begin with, it errs in placing on a footing of equality elements of production which are extremely unequal in importance, and are very different in their mode of action; it ranks together labor, which is actually the *agent* of production, and capital, which is only an *instrument;* it puts on the same grade labor and nature, which are the *original* factors of all production, and capital, which is merely a factor of the *second order*, being a derivative product of the two first.

Again, it is incomplete; for it omits certain conditions of production which are as important as those it enunciates, *e.g.* time, the environment, and so forth.

The process of individual production should be represented as follows: —

Man is the sole agent of production, understanding the word "agent" to mean that it is he alone who can take the initiative in every productive enterprise. This activity of man, in so far as it is employed for the production of wealth, is called *labor*. But this energy cannot work in the void; it does not emanate from a creative fiat; for its fertility it requires certain external conditions which we shall now enumerate. They are five in number.

1. *Raw material.* Man, as we have just said, cannot make anything out of nothing. This is then a *sine qua non* — as it is, indeed, for the wealth that is wrongly called non-material, or services rendered. Human speech is only air in motion.

2. *A certain extent of ground.* For the production of anything some place is required, were it only sufficient to hold a work-bench or a loom.

3. *A certain duration of time.* Man's activity is limited by time as much as by space. No act of production can be instantaneous. We shall see that this condition, like the preceding one, far from being purely metaphysical, has consequences which are of serious economic importance and of great practical interest.

4. *Certain tools.* In production man cannot dispense with those implements which, as has been well said, play for him the part of supplementary organs. Of the numerous definitions which have been proposed for distinguishing man from animals, "maker of tools" is certainly one of those which fit him best.

5. *A favorable environment*, which is composed of climatic, geographical, and geological conditions. Man's activity, like that of every other living being, is subordinated to the environment in which he lives and should evolve.

Such is the order in which the conditions of individual production should be analyzed. Still, although persisting in regarding

the old tripartite division as a vexatious one, we have been obliged to adhere to it at least in form. Indeed, for us, in a book like this, to break with a classification which has been unanimously adopted in all books and in courses of instruction,[1] would be to confuse our readers. All that we can do is to try and fit these conditions into the classical frame as well as is possible, though some, indeed, do not easily lend themselves to such an attempt. We will now take in succession land, or rather nature, labor, and capital, and seek under each of these three heads for the various conditions just enumerated.

[1] Dr. Böhm-Bawerk, *Kapital-Zins*, Vol. II, 83 (English translation by Smart, p. 79), recognizes only two productive forces — Nature and Man. See *Harvard Quarterly Journal of Economics*, April, 1889, p. 337. — J. B.

CHAPTER I.

NATURE.

By the word "nature" we must not understand a fixed factor of production, for that would be meaningless, but rather the whole body of the pre-existing elements supplied to us by the environment in which we live.

The term "land" was formerly employed instead of "nature." The expression, indeed, is equivalent in extent, if we are to understand by it not simply cultivable ground, but the terrestrial globe. No doubt, our planet, and merely the superficial crust of that, is the only portion of the universe which can serve as the field for our economic activity. Still, as savage tribes have been known to make use of the crude iron they have discovered in fallen aerolites, and as we directly borrow the sun's light for our photographic processes and its heat for "Mouchot" machines, taking all in all, the term "nature" is the more accurate.

Now, for man to produce aught, nature, as shown in the previous section, must provide him with a favorable environment, a large enough extent of ground, and raw material which can be utilized. Ground might be said to be included in our term, "environment." It is so philosophically, but not so, economically: for ground is an object of property, whereas the environment is not: thus ground is a separate element. She also supplies him with the natural forces which work his machines. We will say a few words on each of these four ways in which nature collaborates with man.

I. The Environment.

It is possible that some historians or philosophers like Montesquieu may have exaggerated the influence of the geographical environment on the social and political development of peoples,

but it would be difficult to exaggerate this influence so far as it concerns economic development and productive power. Air, water, and land have all had a decisive influence on the evolution of human societies.

Le Play's school builds up the whole of social science from this question as to the environment. It distinguishes three kinds of ground which give rise to the three types of primitive societies: the *steppe* to the *pastoral* races, the *seashore* to the *fisher* tribes, the *forest* to the *hunter* peoples. These are the fundamental types of *simple* societies, *i.e.* those which subsist purely on the spontaneous products of the soil; but Le Play's school goes further and derives from them by relation of necessary affiliation, all the *complex*, or, in other words, civilized societies. Thus from the primitive state of the soil it accounts for the origin of the establishment of property, of the family, etc. This system has been treated in a very interesting manner by M. Demolins in the *Revue de la science sociale*, 1886.

1. *The climatic situation.* Tropical lands may have witnessed the growth of brilliant civilizations, but they have never been favored with laborious and industrially fertile races. For there Nature seems to discourage productive activity both by her generosity and by her outbursts of violence. In those blissful climates where "bread grows like a fruit," and clothing and even housing are scarcely required in consequence of the warm temperature, man comes to rely upon nature and spares himself all effort. On the other hand, in those regions physical forces are so exceedingly violent, their various manifestations, torrential rains, floods, earthquakes, cyclones, are so irresistible, that man is cowed and does not even conceive the audacious idea of conquering them and turning them to his own ends: he scarcely dreams of measures of self-defence. In our temperate lands Nature is niggard and severe enough to compel man to rely in great measure upon his own efforts; but the forces she displays are not so awe-inspiring as not to allow human industry to tame her. In this way she may be said to favor productive activity both by what she refuses and by what she gives.

2. *Geographical configuration.* Were it not for her insular position, who would ever dream that England would have become the first maritime and commercial power in the world? If a proof were necessary of the dominant part this factor has played in the destinies of England, it would be supplied by the curious feeling of terror which possessed her lately at the mere prospect of being united to the Continent by a submarine tunnel.

Why has the continent of Africa, known to man from the remotest antiquity and the seat of the earliest of all civilizations, that of Egypt, remained to this very day out of the sphere of all economic movements? why, on the other hand, are the two Americas, the discoveries of a mere yesterday, cut in all directions by the currents of commerce? The chief reason is to be found in the difference of their river inter-communication. The rivers of the New World flow into the ocean by huge estuaries, and are joined together by such an intricate network, that we can pass from the tributaries of the River Plata into those of the Amazon and thence to those of the Orinoco, and in the northern continent from the basin of the Mississippi to the Great Lakes, almost without leaving the waterway; but all the African rivers, though no less large, greet the explorer at the lower parts of their course with a barrier of impassable cataracts or of pestilential swamps.

3. *The geological constitution* of the soil and sub-soil exerts no less influence; for it is this which creates agricultural and metallurgical wealth. The dread with which England calculates the time when her coal mines may begin to fail her, shows well enough how much she owes them for her industrial development. China has her "yellow" earth, and Russia is no less a debtor for her rich "black earths" — *rich* literally, not merely figuratively; for according to statisticians they contain nitrogen to the value of 640,000,000 pounds sterling.

It would appear at first sight that man is unable to modify the environment with which nature has surrounded him, that his only resource is to adapt himself to it as best he can. Yet he does succeed in exercising some modifying influence on this very envi-

ronment, though it, perforce, is extremely limited. As regards geology, he cannot create mines where there are none, but by judicious agricultural improvements he can remake the cultivable soil in detail, and make arable tracts of the sites once occupied by marshes, stagnant ponds, and even gulfs of the sea. As regards geography, he cannot alter the great marking lines drawn by Nature, but with a little favor on her part he can succeed in modifying them. Thus he can complete a network of inland water-communications, can overcome the barriers raised by mountains and arms of the sea, by constructing roads either above or, better still, beneath them; and greatest of all, can separate Africa from the Old World continent, and South America from the New World, thus turning these two peninsulas into two islands. Climate certainly cannot be changed; but by plantations on a large scale, by fitting cultivation, perhaps, too, by other means, the secret of which we have not yet guessed, human industry will be able to advantageously modify the sway of rain and even of the winds. Thus some scientific men have proposed to alter the course of the great maritime currents, such as the Gulf Stream, for the purpose of distributing heat or coolness among the continents, just as water and gas are distributed in towns.

II. The Ground.[1]

Man needs a certain amount of space on land, were it only to stand on. He requires rather more to sleep on, still more to build his house on, and far larger room for the sowing of his corn or the pasturing of his flocks and herds. Now this question of room becomes very serious as soon as the population of a country has grown sufficiently dense. When human beings, in obedience to

[1] The word "land," which is ordinarily used, is a very complex combination of ideas; first comes a *superficial extension*, which we represent by the word "*ground*"; then there are *raw materials* exemplified by the elements which compose the soil and the subsoil; finally come a number of *physical and chemical* agencies which are ever at work in cultivated ground in the form of light, heat, humidity, electricity, and so forth.

their sociable instincts, group together in one of those huge ant-hills called London or Paris, New York or Hankow, the necessary space for housing them ends by becoming deficient; then plots of land acquire a higher value than that of the buildings which cover them, even were they palaces made of marble; and as we shall see when dealing with house-rent, the resulting social consequences are most deplorable for the working-classes.

However, we need not fear that one day there may not be room enough on the earth for men to live on; yet it is not unreasonable to ask whether there will always be enough space for men to obtain food from. For the portion of ground necessary to supply food for one man is of considerable size, and this portion is always being diminished by the progress of civilization and agricultural methods. For hunter peoples several square leagues are needed per head; for pastoral races some square miles; for agricultural nations a few acres are enough; and the limit falls as men pass from cultivating the land far and wide to cultivating it thoroughly and deeply; *i.e.* from extensive to intensive cultivation. In China this latter mode of cultivation, which has almost become kitchen-gardening, enables several men to subsist on the produce of two and one-half acres. Yet this defect, though considerably lessened, still continues, and tends to make the human race somewhat anxious as to its future.

No doubt, when the required space begins to fail him, man will be able to seek it elsewhere. The discovery of the New World, of South Africa, and of Australia has enormously extended his territory and renders certain enough room for many generations still to come. Yet these reserves stored up for the future will be exhausted some day. Now if we are already somewhat anxiously estimating the amount of coal we still have to burn, we can reckon far more easily the amount of earth that remains over for us to lay hands on. There is no hope of discovering any new lands. Though the surface of the globe is not yet entirely occupied nor even known to us, still it is all measured out. Before another century has passed away the last vacant spot will have

been filled up, the last landmark will have been planted, and henceforward the human race will have to content itself with its fifty-two million square miles, without the hope of increasing it by new conquests.

Its only consolation then will be to repeat the line that Regnard inscribed, with a presumption the future has falsified, upon a rock in Lapland, "*Et stetimus tandem ubi defuit orbis.*"

III. The Raw Material.

The inorganic substances which compose the earth's crust to the slight depth to which we have been able to penetrate, and the organic bodies which proceed from the vegetable or animal living creatures which people its surface, supply industry with the raw material that is indispensable to it, and form the original elements of all wealth.

Some of these materials Nature has spread about with lavish profusion; of others she has been excessively sparing. Among the former may be mentioned some of the constituents of the earth's crust, — granite, chalky matters, clay, and the fresh or salt water which covers three-quarters of the earth's surface. But those carbon-crystals we call diamonds, and even some metals, such as gold or mercury, are found in exceedingly small quantities.

Even the substances that exist in large quantities may be scarce if some one particular region be considered. No doubt there are enough stone-quarries in the world to build thousands of capitals like Paris, but all the same they may be absent from the required site of some city, say Nineveh of old time, or London to-day. Sea-salt is unbounded in amount, but is scarce enough in Central Africa to be used for money. Fresh water is the typical example of wealth which is unlimited in supply, yet we need not go as far as the Sahara to find places where water is scarce, and can only be obtained with much engineering toil. In fact, there is only one body which is ubiquitous and immeasurable; to wit, the atmospheric air which surrounds and envelops the entire globe

with a uniform layer. But even this air is not within the reach of every one, if special conditions of salubrity, coolness, or heat are required. An arid plot at Cannes or Nice sells for £4 a yard. Why? Because what is paid for is not merely the right to the ground, but the right to an atmosphere and a sun that are not found elsewhere.

As regards the materials which are superabundant but unequally distributed, human ingenuity can remedy such a disadvantage by removing the substances and *transporting* them to spots where they are lacking. Hence, as we shall see later on, transportation is really an act of production. But since matter, owing to its weight and inertia, opposes a powerful resistance to any attempt at removal, and since the labor and expense necessary for the overcoming of this resistance increase in proportion to the distance to be covered, industry is not all-powerful, and can only relatively harmonize the inequalities of nature. Nevertheless, men are now so well furnished with implements for this kind of labor, that the effect produced is by no means small.

It is clear that man cannot increase in amount substances which are really restricted in quantity. It is not for him to create one atom of matter. Yet, by the aid of chemical combinations or decompositions, he can build up the bodies he requires. If the stock of diamonds ever runs short, he may be able to manufacture more by crystallizing coal; or if coal, in its turn, ever becomes exhausted, he may succeed in extracting it from the carbonates of lime which are so very common in the earth's crust. In other cases, human industry will have to restrict itself to discovering some *substitute; i.e.* some substance possessed of properties analogous to those of the missing body. This search is usually more or less successful; for there is such an infinite variety of organic substances and lifeless matter, that some can be found which possess common characters, and can therefore, to a certain extent, supply one another's place. Animal ivory is threatening to become extinct in consequence of the wasteful and destructive mode of elephant-hunting; but in the forests by the Amazon a substitute has been found in a vegetable ivory.

IV. Motive Forces.

The work of production consists purely of changing the place or the form of matter. We have seen that, because of its *vis inertiæ*, matter resists this treatment, and man's muscular strength is not very great.

Nevertheless, by the invention of *tools*, man has been able to create artificial organs which have wonderfully added to his strength and dexterity. Thus, by means of a hydraulic press, a child can exert unlimited pressure; and Archimedes justly boasted that with a lever and a fulcrum he could raise the earth. Yet some mathematicians have taken the trouble to calculate, that, even if he had found his missing fulcrum, he could have raised the world only to an infinitesimally small height, even by working for some million years. For it is a law of mechanics that when using tools man loses in time what he gains in strength. By them he can lift a weight a thousand times heavier than he could by his arms alone, but he will have to take a thousand times as long over the process. Now, time being a very precious element, which we should be chary about wasting, the practical advantage of the use of tools is comparatively limited. On the other hand, the employment of machines multiplies strength indefinitely.

In all times, therefore, and especially since the abolition of slavery has denied him the gratuitous employment of the strength of his fellows, man has striven to fortify his weakness by the aid of certain motive forces supplied to him by nature. There are not very many of them, though too favorable reckonings have been made. In truth, there are only four which man has been able to use in production: the *muscular strength* of animals; the *motive force of winds and of water;* and, best of all, the *expansive power of vapors*, especially of steam.

It should be observed that in proportion to the powerfulness of these natural forces have been the time and trouble necessary for man to expend before succeeding in utilizing them and turning them to his ends. This is natural; for resistance increases in

direct ratio to the force. These results have been effected by the aid of *machines*. A machine is but a tool or implement, which instead of being moved by the hand of man, is worked by a natural force (water power, steam, etc.). Now a difficult problem in mechanics is involved in this handling of a natural force which is sometimes irresistible, sometimes unseizable, so as to compel it to turn a wheel, push a plane, or work a shuttle.

The domestication of various animals, such as the horse, camel, elephant, reindeer, and Esquimau dog, supplied mankind with the first natural force they used for carrying, draught, and tillage. That of itself was a valuable conquest; for an animal is proportionally stronger than man. A horse's strength is estimated as seven times greater than a man's, and the food he requires is by no means of greater cost. But the number of such animals in a country is restricted in proportion to the increase of population, for they require much space whence to obtain food; thus the motive force they afford is, relatively speaking, not of any great account.

The motive force of the wind and of rivers has always been used for carriage, and at a later date, though still at a high antiquity, for turning mills. These, indeed, are most powerful agencies. The motive power of streams in France alone, which is uselessly expended in wearing out pebbles, has been calculated to amount to thirty millions horse-power; that is to say, to a force equal to the strength of all the men of an age fit for work, who are to be found on earth at the present moment. One single waterfall, such as Niagara, would feed all the factories in England. In the few hours of its devastating existence, a cyclone develops enough motive force to keep going all the workshops in the world for a thousand years, if we only knew how to use it. The waves into which the wind furrows the bosom of the sea, the tides which twice a day break on thousands of leagues of coast-line, form literally inexhaustible reservoirs of force. Unfortunately up to the present man has found no mode of turning them to account. They are still in a savage or untamed state, sometimes too power-

ful or too weak, too irregular or too intermittent. Thus the forces which might raise the world are even now scarcely used but to turn a few wretched mills.

The expansive power of vapors, or rather the heat generated by combustion, of which this force is only a transformation, grants man the priceless advantage of being able to develop it *where, when, and as he will*. It is mobile, portable, continuous, large or small according to demand. We raise it from one up to ten atmospheres, and theoretically, at least, there is no limit. If water was heated to 516 degrees Centigrade, a not exceedingly high temperature, we should develop a pressure of 1,700,000 atmospheres, which is more than sufficient to raise the Himalayas. The only difficulty would be the discovery of a strong enough envelope. In fact, this force is artificial, being created not by nature, but by man: he has made it for his own use and works it as he wishes. No more obedient slave has ever bowed under a master's yoke.

The prehistoric inventor, whose name will forever remain unknown, but whom the gratitude of mankind has deified as Prometheus, he who first caused a spark to spring from the friction of two pebbles, never suspected when he looked on this flame, which was certainly due far more to chance than to his genius, what marvellous power he was granting to human industry. First of all, no doubt, fire ministered only to the humblest wants of domestic life. Later on it was used for the extraction, the founding, and the working of metals. Its utilization as a motive force dates from the time that men discovered the explosive power a spark could communicate to some substances, *i.e.* gunpowder, and in this form it is still employed, not only to propel projectiles for a mile or two, but also to bore tunnels. But it was not till Newcomen, in 1705, and James Watt, in 1769, had used it for dilating steam confined in a chamber, and had thus created the wonderful instrument of modern industry which we call the steam-engine, that fire, or rather heat, became the guiding spirit of industry. I say that the steam-engine is a "wonderful" instrument, for the sake of the services it has rendered us. In reality it is very

defective; for it utilizes only a small part, at most a tenth, of the heat generated by the combustion of the coal. There is great waste from the furnace to the boiler, and further, though smaller, waste between the boiler and the engine proper. Hence the remark of M. Le Bon, an engineer, "I hope that before twenty years have passed, the last specimen of this rude machine will have taken its proper place in museums, side by side with the stone hatchets of our primitive ancestors."

It will be seen from the following that anxious speculations may justifiably be made as what would happen to human industry if, the supply of coal ever failing, furnaces had to be extinguished, and it could no longer generate at will that heat which is indispensable to it as the source of motive power. People sometimes try to set their minds at ease by such foolish proposals as that of replacing heat by electricity, though the only practical means we have of producing electricity on a large scale is precisely the steam-engine.

Men are already beginning to ask whether it is not possible to utilize the immense forces whose activity is displayed in those movements of the atmosphere and of the waters, to which we referred just now, or if it will be necessary to draw the heat which we require from the source of all force, the sun itself. There, in truth, is a really incalculable fount of force, which is estimated to be equal to $9\frac{1}{2}$ millions of horse-power per square mile. This is already used by the Mouchot machine, but in a practically insufficient manner. Even admitting the success of such an attempt, this force borrowed from the sun will have the disadvantage common to it with the other natural forces, of not possessing the property of being generated where, when, and as we wish. It will not be manageable. The sun does not shine always or everywhere. If on that orb is to fall the task of keeping our workshops going, England will be doomed as a manufacturing and industrial power; the fogs of the North Sea will become her winding-sheet, and men will henceforward have to journey into the heart of the Sahara to build their industrial capitals!

Still, to be able to avail ourselves of these natural forces, we only require to find the secret, on the one hand, of *transporting* them for long distances, so as to apply them to the point where they can be utilized, and, on the other hand, of *storing* up those forces which are developed only intermittently, so as to employ them at the moment when they are required. Electricity seems capable of rendering us this double service. The fact is already established that force can be transported, just as a despatch, by a simple telegraphic wire, but one made of copper and somewhat larger than the ordinary wires. Moreover, electricity can be stored up in accumulators that are already used to propel steamers, tramways, and balloons.

In that quarter, perhaps, lies the germ of a beneficent revolution in industry. If some day motive force could be distributed from house to house, like water or gas, and could be obtained by the mere turning of a tap,[1] we should see no more of those huge workshops, which to the laboring classes are as unhealthy quarters, from the hygienic as they are from the moral point of view, and which, together with other disadvantages, render family life impossible.

[1] This is being done even now, to some extent, in Germany, where the small concerns still employ more hands than the large (in 1882, four millions as against three millions). See an article by Dr. Albrecht of Berlin in Schmöller's *Jahrbuch für Gesetzgebung* (1889), 13th series, Part II. — J. B.

CHAPTER II.

LABOR.

I. On the Part played in Production by Labor.

To achieve its ends, and principally to satisfy the necessities of existence, every living thing is obliged to do a certain amount of work. The seed has to toil to raise its covering, the hardened crust of the earth, and then breathe the air and feel the light. While clinging to its bed, the oyster opens and closes its shell in order to draw from the surrounding water the first elements of nourishment. The spider spins its web, the fox and wolf labor while they hunt their prey. Man is not exempt from this universal law; he, too, has to persevere and toil in order to supply his wants. As Xenophon says, "The gods sell us all good things at the price of our labor." Among plants this striving is unconscious, among animals instinctive; with man it becomes a voluntary and conscious act, and its name is *labor*.

But is there not some wealth that man can obtain without work, such wealth as nature lavishly bestows on him?

It must first of all be observed that there is not a single *product* which does not in some measure presuppose the intervention of labor. That follows from the meaning of the word "product," *productum*, "drawn from somewhere." But what could have performed this drawing or extraction except the hand of man? For the application of fruits to the satisfying of our wants, even those fruits which nature has given us, such as the bread-tree fruit, the banana, dates, or those shellfish which in southern lands are called sea-fruit, man must have given himself the trouble of gathering them. Now, this gathering is clearly labor, and under certain circumstances work of an exceedingly laborious nature.

It should further be remarked that a just conception is not usually made of the important part played by labor, even in the formation of those products which are often very inaccurately termed "natural." We are too ready to believe that everything which grows on the earth — cereals, vegetables, fruit — all are due to the generosity of that *alma parens rerum*. As a matter of fact, most of the plants which supply man with food have been, if not created, at any rate so modified by the cultivation and the labor of hundreds of generations, that botanists cannot discover their original types. Wheat, maize, lentils, beans, have been found nowhere in the wild state. Even such species as are met with in a state of nature are wonderfully different from their cultivated congeners. Between the acid berries of the wild vine and our grapes, between the edible vegetables and succulent fruits of our kitchen-gardens and orchards and the tough roots and the bitter or even poisonous berries of wild varieties, there is a vast difference; so great, indeed, that these fruits and vegetables may be regarded as artificial products; that is to say, as actual creations of human industry. Here is the proof. If the constant labor of cultivation be relaxed for a few years, these products speedily degenerate; *i.e.* they revert to a state of nature, losing all those virtues with which human industry had endowed them.

It is true, however, that some wealth is not the product of labor, precisely because it is not a product; *i.e. it pre-exists before any act of production*. I refer to the earth and all the organic matter or inorganic substances with which it supplies us, — the bubbling spring of water or petroleum, the growing forest, the natural prairie, the stone-quarry, the coal or metal mine, the waterfall suitable to turn a mill-wheel, the guano-bed deposited by sea-birds, the fishery banks teeming with fish, shellfish or coral; in a word, the original source of the elements of all our wealth.

These, surely, constitute wealth, and of the first rank in order of importance, but they clearly exist independently of any labor done by man.

Still for a just conception of the part played by labor in production, we must add two further points.

1. Such wealth does not exist, *qua* wealth, *i.e.* as useful and valuable objects, until human intelligence has been able, firstly, to discover their existence, and furthermore to perceive that they possess qualities which render them fit to satisfy any of our wants. Let us take, for example, any piece of land, say a corn-land in America. Why is this wealth? Because some explorer or pioneer, following the course Christopher Columbus first opened out, has discovered the existence of this particular spot. Now the fact of discovery, whether it be applied to a New World or to mushrooms in a wood, always presupposes a certain amount of labor.

2. Again, such wealth cannot be utilized, *i.e.* employed for the satisfaction of man's wants, until they have been subjected to more or less labor: in the case of virgin soil, till it has been cleared and opened out; with a mineral spring, till it has been secured and bottled; with mushrooms or shells, till they have been gathered.

Thus even with wealth which is termed natural, labor is seen to be a real agent of production; for without it, such objects would be virtually non-existent for us, inasmuch as they would serve no purpose for us. In a word, it is labor which discovers and utilizes them.

Of course, we do not imply by this that natural wealth obtains all its value from labor; we have already rejected that theory. According to Bastiat, all natural wealth is *gratuitous*, *i.e.* valueless, because such objects are the free gift of nature, and may be held to preserve that character in all the successive transactions through which they may pass. But the most ordinary observation suffices to give the lie to that theory, which, indeed, was merely conceived to defend landed property from the reproach the socialists bring against it, of monopolizing the gifts of nature which should be the common property of all men. As value is based on utility, all natural wealth, such as virgin soil, gold-bearing strata, guano, etc., possesses a value which exists before any act of labor. For a long time the government of Peru has had no other income but the sale of its guano.

II. How Labor produces.

When we survey the infinite variety of products which rise from under the fairy fingers of human industry, we are apt to imagine that labor is a power which is infinitely complex in its methods, and which defies all analysis. Yet it is nothing of the sort. Labor is merely a muscular force directed by some superintending intelligence: it can have no effects but those of a motive force, and that, a very weak one; viz., a *movement*, a *change of place*.

This displacement may be a change of place of the object itself, or of its component parts. In the latter case, we say that there is a change of form, but every transformation amounts to a displacement. The exquisite shapes assumed by clay under the hand of the potter or the statuary, the rich and ingenious patterns wrought on lace by the fingers of the lace-maker, have no other cause than the arrangements, or rather, the displacements, of the molecules of clay or the threads of the tissue. All that man's labor can do is to stir, separate, reunite, insert, superpose, and arrange effects which are only different modes of motion. Take the production of bread, and pass in review the various acts of this production, — ploughing, sowing, reaping, winnowing, grinding, sifting, kneading, putting in the oven, — they are nothing but movements and changes of place effected upon matter. Analyze any other industry, and no other factor will be found; for this is the only part man plays in the work of production, this is the limit of his power. All the profound transformations which are effected in the constitutions of bodies and which by modifying their physical or chemical properties conduce to production, — the mysterious evolution of a plant from its seed, the fermentation which turns a sugary syrup into alcohol, the chemical combination which turns out steel from the furnace iron, — these are not man's work. His part has been limited to placing the materials in the required order: the corn in the earth, the vintage in the vat, the ore in the furnace; nature has done the rest.

Yet, however feeble this motive force may be, it is strong

enough to transform the world; for it is exerted by an intelligence which knows how to turn it to the best possible use. Man's strength is relatively feeble when compared with that of animals. For instance, it is one-seventh of a horse's, though a horse is not seven times heavier, and is certainly not seven times larger.

Still, we must say, that though man has less muscular force than the animals, he has generally more dexterity, and this he especially owes (as the very name shows) to that marvellous organ we call the hand.

Every physical labor, properly so-called, must be preceded by a purely intellectual labor which we term "invention"; this consists in discovering the practical means of turning to our ends the forces we have power over, and the objects to which they can be applied. Invention is not, as might be believed, a rare gift which can only be displayed by a few learned men; on the contrary, it is intimately bound up with every act of production. The Paris knick-knack maker who fabricates for the shops some fresh New Year's Day toy at a farthing apiece, the joiner who tries to make the best use of a plank, are also inventors in the accurate sense of the word. There is no movement of a workman's arms or fingers, there is no combination or organization of labor, which has not been originally invented by some artisan. From this point of view we can say that human intelligence is the first, nay, the only agent of production.

However, when once made, invention has the power of serving as the basis of an unlimited number of acts of production, or, rather, of re-production; hence the difficulty which the legislator experiences in regulating and protecting the inventor's right of property.

The words "invention" and "discovery" should not be confounded, and, indeed, popular speech has well distinguished between them. It is correct enough to say that Christopher Columbus discovered America, but we should laugh if we were told that he had invented it. Discovery is the revealing of the existence of an object which was previously unknown (such as a

land, a substance, a star, or a new property of some already discovered body). Invention is the conceiving of some new mode of turning to account elements of which we are cognizant and over which we have power. Thus discovery may be regarded as the initial act in the process of production, the first link of the chain from which all the others are hung. Every land now under cultivation, all the wealth that we use, each force that we employ, must at some time or other have undergone this process of discovery.

III. What Kinds of Labor should be called Productive?

Economic doctrines on this question of productive labor possess a very curious history. The title of "productive," which was primarily reserved for a single class of labor, has gradually been extended in its application, and has ended in being indiscriminately bestowed on all species of work.

The school of the physiocrats confined the epithet "productive" to *agricultural* labor (including therein, hunting, fishing, and mining), and denied it to every class of labor, even to manufacture. The reason assigned was, that it is the first-named industries alone that furnish the materials for all wealth, and that all other labor is merely engaged in the working of these materials.

This definition of the physiocrats was clearly too narrow. Raw material, as it is handed over to us by agricultural labor or extractive industry, is usually altogether unfit for consumption; it has to undergo numerous modifications which are effected by *manufacturing* industry. Manufacture is the indispensable complement of the former labors, and without it the process of production is as incomplete as a play with the last acts suppressed. Of what use would the ore be at the pit's mouth, if it were not to go thence to the forge or the foundry? Of what use would corn be, if it had not to pass through the hands of the miller and the baker? Were it not for the weaver's labor, flax would be no more useful than the nettle. How, then, can we refuse to these labors the

title of "productive"? for without them all these kinds of wealth would be useless to us; in other words, would not be wealth at all.

It is altogether a mistake to think that agricultural and extractive industries *create* wealth, whilst manufacture only *transforms* it. As we have already shown, the agriculturist himself merely transforms the simple elements he has borrowed from the soil and from the air. He makes corn from water, potassium, silicon, phosphates, and nitrogen, just as the soap-maker fabricates his soap from soda and fatty bodies.

Hence, from Adam Smith onwards no one has hesitated to include manufacture in productive labor.

There has been a longer hesitation as to the labor of *transport*, for the act of *transport* does not appear to effect any modification in the object. The bale of goods is the same at the station where it arrives as at the station whence it came. That, it is said, is a characteristic distinction from manufacturing industry.

The drawing of such a distinction is scarcely philosophical, for every act of displacement effects an essential modification in bodies; indeed, as we have just seen, is the only modification we can cause in matter. What we call transformation in manufacture is nothing but an arrangement; in other words, a change of place of the component parts of substances. If we were to deem a displacement not to be a sufficient modification to be termed productive, we should have to refuse that appellation to extractive industries; for what is the miner's work save the transporting of ore or coal from the bottom of the shaft to the surface of the ground? Now what distinction can be established between such labor and the wagoner's work in taking this ore or coal from the pit's mouth and carrying it to the works, — unless we assert that displacement is productive when it is exercised vertically, but is no longer so when horizontal? Besides, it is scarcely necessary to add, that just as manufacture is the indispensable complement of the agricultural and extractive industries, so, too, the labor of transporting is the requisite complement of its predecessors. What would be the use of stripping bark trees in Brazilian forests,

of extracting guano from the Peruvian islands, of hunting elephants for their tusks in South Africa, if we had no sailors and carriers to convey these products to the places where they are to be used? What profits it a landowner to have the finest crop in the world, if the lack of a road prevents him transporting it? It is just as if he had no crop at all.

With regard to *commercial* industry the hesitation has been even longer. For it may be noted, that the process of trade reduced to its lowest terms, *i.e.* to the act of buying for the purpose of selling again (for that is its legal meaning), does not imply any creation of wealth. No doubt those who engage in it may make much money, but that does not add to the general wealth; in truth, we shall see that the multiplication of business men and middlemen may become a veritable scourge for modern societies. Thus, if commerce can be classed among productive labor, that can only be done with great reservations.

On the other hand, we must observe that men of business are most usually occupied with the transport of goods, as is the case with shipowners who carry on the export or the import trade. In a certain measure, too, merchants may be regarded as the actual directors of transport all the world over: the carrying industry only executes their orders. Moreover, they preserve goods in the shape of stock in hand. They even subject them to certain modifications: the cloth merchant cuts his strips, the grocer roasts his coffee, etc. It is through them that the commodity comes into the hands of the consumer, and thus the cycle of production is closed.

Finally, discussion has been keenest with regard to services rendered, such as those afforded by the *liberal professions;* for it may seem strange to call "productive" the labor of the surgeon who amputates a leg, or of the executioner who cuts off a head. However, this last step has also been taken, and now without halting at antiquated and pedantic distinctions, we have come to place under the heading of productive labor all labor that in any way whatever contributes to the satisfaction of the wants of man.

It is a logical consequence of the theory we have expounded, that services rendered, as well as material objects, should be placed in the list of articles of wealth. However, it is of little importance whether this new departure be accepted or not, and if material objects alone are allowed to rank as wealth. The term "productive" should be taken in the widest possible sense. In the social organism, thanks to the law of the division of labor, there is such a solidarity between the labors of men, and they are so closely related, that it is impossible to separate them.

Take the production of bread. We need not hesitate about classing as productive labor the respective toil of ploughmen, sowers, reapers, wagoners, millers, and bakers, beginning with Triptolemus, the legendary inventor of corn, and all his successors who have discovered the varieties of cereals and have invented the rotation of crops, or the methods of intensive agriculture.

But we cannot restrict ourselves to pure manual labor. It is clear that the labor of the farmer or of the lord of the manor, though he may not himself have put his hand to the plough, is very useful for the production of corn, just as the shepherd joins in the production of wool though he does not shear the sheep himself. Neither can we ignore the work of the engineer who has prepared the plan of a system of irrigation, or of the architect who has constructed the farm-buildings and the barns.

Must we stop here? We might; but have not the following also contributed to the production of corn, and should not their work, too, be termed productive? I refer to the county policeman who has frightened away robbers, to the public prosecutor who has prosecuted them, and to the judge who has sentenced them; nor should I forget the soldier who has protected the year's crop from even worse ravagers; viz., foreign armies. What shall we say of the labor of those who have moulded the agriculturist and his men, of the instructor who has taught them their ideas of agriculture or has put them in the way of obtaining such knowledge, of the doctor who has kept them in good health? Is it a matter of indifference for the production of corn or any other

wealth, that the workers be well taught and of sound constitution? Are we to disregard the question as to whether they are well administered and governed, are in possession of order and security, and enjoy the benefits of a good government and good laws? Are we justified in putting aside the kinds of labor which are the most alien from agricultural pursuits, those of writers, poets, and artists? Are we to think that the taste for agricultural labors, and consequently the production of corn, cannot be usefully developed in a society by novelists who depict scenes of country life, or by poets who celebrate the pleasures of rural occupations and teach us to repeat, after the author of the *Georgics*,—

> "Fortunatos nimium sua si bona norint
> Agricolæ"?

Where, then, are we to stop? We see the circle of productive labor extending to infinity, to the farthest bounds of society, like those concentric circles which spread on the surface of the water round the centre we have agitated, and which are lost in the distance, without the eye being able to perceive the limit where they stop. No doubt the various kinds of labor we have just passed under review have not contributed to the production of corn in the same way; some have acted directly, some only indirectly; but none of them, beginning with the ploughman's toil and reaching to the occupation of the President of the Republic, could be suppressed without the cultivation of corn suffering therefrom.

Still, though we cannot make definite distinctions between these various kinds of labor, yet, proceeding from the centre to the circumference, we can establish a sort of hierarchy arranged, not in order of dignity, but according to their economic utility.

The most important for the wealth of a country are labors of discovery and invention; then come agricultural pursuits, next manufacture, after that the labor of transport, and last of all commerce and official employments. The fewer the people engaged in these last two kinds of labor, the better it will be.

However elementary this classification may appear to be, its

exposition is not a needless one; for every day it is utterly misunderstood by customs and by laws. Thus governments spend millions on developing means of transport without first finding out whether there is anything to transport; and thus, too, the number of people engaged in retail trade or in official employment increases every day, while agricultural pursuits are more and more abandoned.

IV. On Pain as a Factor of Labor.

All productive labor presupposes a certain amount of toil, and this is a law of supreme importance in political economy. Indeed, if labor was not a toil, pain or difficulty, all economic phenomena would be other than they now are. For instance, if men worked for pleasure, there would no longer be any *raison d'être* for individual property so far as it may be regarded as the just recompense for labor and the necessary stimulus to human activity, which indeed is its principal basis. In that case the most serious objection that can be brought against communism would fall to the ground.

Fourier, the socialist, perfectly understood this: thus the pivot he gave to the future society that he proposed to organize was *attractive labor*. He asserted that labor was painful solely on account of a flaw in the organization of our modern societies, and he boasted in his phalanstery that he would make labor attractive for all men by free choice of avocations, variety of occupations, shortness of tasks, *esprit de corps*, emulation, and a hundred other combinations, some of them ingenious, some fantastic.

Why not? it may be said. Labor, taken as a whole, is only a form of human activity; now activity has nothing painful about it. To act is to live; it is absolute inaction which is a torture, and so cruel an one that when it is too prolonged in solitary confinement, it will kill the sufferer or turn him mad. There is no essential difference between labor and a number of exercises which are regarded as pleasures, though they often require an expenditure of

strength higher than that needed by labor; *e.g.* mountaineering, boating, gardening, even dancing. If Candide took his pleasure in cultivating his garden, and Louis XVI his in making locks, why cannot all men reach this stage of working for the love of it?

The answer is, that man only takes pleasure in action in so far as he can obtain satisfaction from the mere exercise of this activity, in so far as this exercise is a natural function. But when this activity is seen in the light of *the condition of an ulterior enjoyment*, as the effort which he must make to achieve an aim fixed beforehand, — and that is the very essence of labor, — then it becomes painful. Between a boating man who rows for pleasure and a boatman who rows to earn his living, between a tourist who climbs a mountain and the guide who accompanies him, between a girl who spends her evening at a ball and the dancer who appears in a ballet, I see only one difference: the first in each pair row, climb, or dance solely to row, climb, or dance; the others do so to earn their living.

This difference, though a purely subjective one, causes the same modes of activity to be regarded as a pleasure by the former, as a toil by the latter. The man who follows a road only for a walk may take pleasure in it, if it presents any attractions, but he who passes over it night and morning only to reach a fixed point always finds it long and wearisome.

Now for almost all mankind labor is a path upon which they enter for the necessity of living, and therefore, in accordance with the old curse in Genesis, they have labored "in the sweat of their face." Doubtless even the humblest labor has its joys, the joys of duty fulfilled and of a natural law voluntarily accepted; but these austere pleasures will never be felt except by a few chosen spirits, and we should fall into the most chimerical optimism if we flattered ourselves with the hope of one day seeing all men labor solely for pleasure; *i.e.* without requiring the stimulus of self-interest or the orders of compulsion.

In order, then, to induce man to work and to counterbalance the feeling of pain which is occasioned by all labor, a higher force

is needed : for the slave this is the scourge, for the free laborer it is the desire of satisfying his wants. Thus every man who labors is the prey to two conflicting feelings : on the one hand, the desire to satisfy some want or to obtain some enjoyment ; on the other, the wish to escape the pain caused by his work. According as one or other of these desires turns the scale, he will continue or will abandon his labor.

As Stanley Jevons ingeniously observes, the pain endured by the worker incessantly increases in proportion to the prolongation of the labor, while the pleasure he derives from it constantly diminishes in proportion as his most pressing wants begin to be satisfied. Thus out of the two desires, the one requiring him to work, the other inviting him to stop, it is clear that the latter will sooner or later gain the day. Take a laborer drawing buckets of water from a well. Fatigue increases with each fresh bucket he has to draw ; on the other hand, the utility of each bucket decreases ; for if the first was necessary for drinking and cooking purposes, the second will only serve for watering cattle, the third for cleaning purposes, the fourth for watering the garden, the fifth for sprinkling the road, etc. At what number is he to stop ? That depends partly on his power of supporting fatigue, but chiefly on the scale of his wants. The Esquimau, who only uses water to quench his thirst, will stop at the first or second pail ; the Dutchman, who cleanses his house right up to the roof, may have to draw fifty buckets before he thinks he is sufficiently provided with water.

Productive activity can be greatly increased if the stimulus of future requirements is added to that of present and actual needs ; if, for example, in a land where water is scarce, the worker thinks of filling a cistern in readiness for the days of drought. But this faculty of weighing together an immediate pain and a distant satisfaction — a faculty which is really called foresight — belongs only to civilized races. It is characteristic of the French peasants, a stock which is laborious though frugal ; a fact which shows that they labor less to satisfy their present needs, which are very few,

than to provide for future wants, whether those of old age or of their families.

V. On Time as a Factor of Labor.

If all labor involves a certain amount of pain, it also requires a certain expenditure of time. We have already seen that this is one of the essential conditions of all production, a condition which is absolutely universal; for Nature herself, as far as she is associated with man in the labor of production, is equally subject to it; there must be long months of waiting before the seed, slumbering in the furrow, can become the ear, and long years before the acorn develops into the oak.

Between the moment when labor begins and the date when it gives the expected results, there is a more or less long lapse of time; but we may hold it to be a general law, that the longer this period is, the more productive the work should be. It may be short (a few hours are enough) for labors which enable man to live from day to day, from hand to mouth, such as hunting, fishing, or the plucking of wild fruits; but for agricultural works, large industrial enterprises, or those engineering achievements which do honor to our time, such as mines, artesian wells, railways, tunnels, canals, — for such as these the requisite time becomes enormous and proportionate to the hugeness of the results.[1] How many years will go by between the first stroke of the pickaxe on the Isthmus of Panama and the passage of the first ship through the proposed canal?

This condition of all productive undertakings is, as we shall see, one of the very chief causes of the importance of capital and of the privileged position of the holders of capital. Indeed, as he must live while he is waiting for the result of his work, the laborer can attempt nothing without the aid of certain advances, and these are supplied by the capitalist.

It is not enough to state that time is an indispensable factor of all production; we must add, further, that man has only a limited amount of time to dispose of, not only because his life is short, but because numerous deductions have to be made from that. We must take into consideration the following:

Firstly. Man cannot work *every hour in the day.* We must certainly deduct time for sleep and for meals, and experience has proved that nothing is gained from the point of view of production by extending the duration of the working-day. Custom and even law fix this at ten or twelve hours, and the famous formula of the "Three Eights" now tends to a general reduction to eight hours, which would give only a third of the day for labor. Compare with this the refrain of the old English song, —

> "Eight hours to work, eight hours to play,
> Eight hours to sleep, eight shillings a day,"

which has been brought into fashion again by the recent discussions as to the limitation of the hours of labor. As a matter of fact, if we assign a third of the day for sleep, a third for labor, that is to say, for the requirements of economics, and the remaining third for the satisfaction of wants of another kind, but which are no less important for man's development, viz. the duties demanded by family life, social intercourse, education, physical and intellectual recreation, — if such a portioning out of time is to be the normal one, there will obviously be no more space left for labor.

Secondly. Man cannot work *every day in the year*, and there is no country in which there are not a certain number of holidays. England and America rigorously obey the order to observe the Sabbath; the English, moreover, take Saturday afternoon; all this, with some other holidays thrown in, amounts to rather more than eighty days a year. Russia, with its numerous saints' days, has even more. Countries which, like France, pride themselves in being above the sabbatical superstition, gain nothing by that; for if they do not keep Sunday as a day of rest, they compensate for

that by taking Monday, which is observed as a holiday in many French trades.[1]

It is rare for even the most industrious of Parisian workmen to reach an average of 300 days' labor a year. Moreover, days of illness must be reckoned for. Here, again, we must remark that to increase the number of working-days and restrict the days of rest, would only result in a useless expenditure of man's productive strength.

Thirdly. Man cannot work *for all the years of his life;* we have in all cases to deduct the years of infancy, and also those of old age wherever that state is reached. Let us suppose that the normal length of life is 70 years; let us suppose, again, that the period of productive labor begins at 18 and ends at 60,—both estimates being certainly exaggerated; then, even granting such conditions, we should have to subtract 28 years out of the 70, or 40 per cent.

It is clear that the power of productive labor of any individual depends on the relation between the two periods of his life: on the one hand, the unproductive period, with its two sections, childhood and old age; on the other hand, the productive period. While really young or really old, an individual not only does not produce, but also consumes. From a purely economical point of view, it would be by far the best for each man to die just at the end of his productive, and before entering on his unproductive, period. If he dies before this, so much is stolen from his years of production; if he dies after this, his unproductive years are added to. It is in accordance with this line of argument that some peoples slay their graybeards. In all countries, without exception, the average length of man's life is far from reaching the above-mentioned figure, viz. seventy. It usually varies between forty and fifty years as the maximum. Thus the time during which the productive powers are exercised represents a half or at the most three-fifths of a man's life.

[1] This practice, which the French term "fêter le lundi," is represented by the "St. Monday" of English compositors. — *Translator's Note.*

From this point of view, the most favored country is that which can show the largest number of men between the ages of eighteen and sixty, or in the period of "useful life," as the saying is. Thus regarded, France is not unsatisfactorily situated. This distribution of ages depends in particular on the average duration of life in any society. The longer that is, the greater the chance of a large number of adults. Yet highly erroneous conclusions might be reached from following too closely this line of argument. If in one country half the children died unweaned, and in another country the same number of children died at the age of fifteen, the latter country would certainly possess a higher average of duration of life, but still would be far worse off from a productive standpoint. In it the proportion of useless mouths would be much greater. Both on economical and even sentimental grounds, it would be better that every child lost at the age of fifteen had ceased to live when six months old.[1]

To recapitulate: Let us take a man who has worked from the age of 18 to 60 at the rate of 300 days a year and eight hours a day. When he reaches the age of 70, and looks back on the past, he will surely be able to say that he has spent his life well, yet he will have worked only 100,800 hours out of the 613,200 he has lived, or rather less than a sixth.

After these considerations, it is not surprising that man seeks to economize time, and that the most active peoples of our day have taken as their motto, "Time is money."

[1] This argument seems to prove too much. There is no reason for stopping at six months. *μὴ φῦναι τὸν ἅπαντα νικᾷ λόγον.* — J. B.

CHAPTER III.

CAPITAL.

I. On the Part played in Production by Capital.

It would appear that man's labor, aided by nature, ought to be sufficient for production. Animals, sure enough, have to meet the necessities of their existence by their own activity and the objects supplied to them by nature. Yet observation shows that if man's labor and nature are left alone face to face, they are extremely likely to remain eternally sterile. For human industry something more is needed; to wit, a certain amount of wealth which has been previously acquired.

Numerous authors have told the stories of men of the Robinson Crusoe type, and have striven to show us man grappling, unaided, with the necessities of existence; but there is not one of them who has neglected to endow his hero with some tools or provisions which are usually saved from a shipwreck. These writers know well enough that without this precaution the story would have to stop after its second page, for their hero's life could last no longer. What was it that these Crusoes lacked? Had they not the resources of their labor and the treasures of a fruitful though virgin nature? Yes; but there was still something wanting, and as they could not do without it, the writer had to see to their obtaining it. What was it? Why, pre-existing wealth, *capital*. This is the name given to the third factor of production.

But we need not go so far afield as Robinson Crusoe to become convinced of the utility of capital. The heart of our civilized societies presents situations similar to his. In present-day communities there is no more difficult problem than the acquisition of anything when the aspirant possesses nothing. Take one of the

proletariat, a man without any means, — what is he to do to produce what is necessary for him to live on, to earn his living, as we say? A little reflection will show that there is no kind of productive industry that he can adopt, not even the poacher's occupation, for that would need a gun, or at any rate, snares; nor a ragpicker's, for that would require a hook and a basket. Thus he would be as wretched, as helpless, and as surely destined to die of hunger as a Crusoe who had saved nothing from his shipwreck, were it not that the social organization came to his assistance by supplying him with the means of producing something by the aid of wealth previously acquired by others. This wealth he can obtain in various ways, either by contracting loans (a highly improbable proceeding, for only the rich find lenders), or by contracting for wages, putting himself in the pay of an employer, who on certain conditions supplies him with raw material and the implements necessary for production. Such is the usual position of the proletariat. Some socialists appear to think that such a state of things is abnormal, and is due to the defective organization of society. The case is quite otherwise. This quasi-impossibility of acquiring new wealth without the aid of pre-existing wealth is a natural law, which is the same for the savage as for the civilized man, the same in prehistoric times as it is now.

Yet however great be the importance of this third factor of production, it is only the product of nature and of labor. Though nowadays it has acquired such weight as to rank equally with its fellow-workers, and sometimes even to take precedence over them, still we must not forget that logically, historically, and genetically, capital proceeds from the two prime factors. It is not an *agent* in production, as is too often said, but an instrument, an auxiliary, whose aid, it is true, man can no longer dispense with. Once upon a time, however, he was obliged to do without it. It is obvious that the first capital of the human race must have been formed without the help of any other capital. Man was once upon this earth as resourceless as Crusoe on his island, and had to solve the difficult problem of producing the first

wealth unaided by any pre-existing wealth. That no doubt was an anxious moment to go through, analogous to the overcoming of the dead-stop of a locomotive. With his hands alone man had to set a-going the huge wheel of human industry. But, when it was once in motion, the most difficult part of the task was done, and henceforward the slightest impulse has been enough to give it a velocity which is ceaselessly accelerated.

Yes; in the history of mankind there has been a terrible crisis, a long and agonizing parturition; but after that, wealth once engendered and conceived has only had to develop and grow almost of itself. The first, nay the most shapeless of all created wealth, were it but the flint split in the fire of the anthropoid apes, immediately served as a means of making new wealth under slightly more favorable conditions, and these in their turn have served to create others, the facility of production increasing, so to speak, in a geometrical progression, in proportion to the amount of wealth already acquired. But we know that a geometrical progression, though growing with a dazing rapidity after having reached a certain point, increases terribly slowly during its first terms. Our modern societies, then, who, living on the accumulated wealth of a thousand generations, make almost a jest of multiplying wealth in all its shapes, ought not to forget how slow and perilous was the earliest accumulation of the first wealth; they should think, too, of the many centuries through which the first human societies had to pass, through the dim ages of hewn stone and of polished stone, before they could put together their first stock of capital. Many peoples, no doubt, miserably perished while threading that terrible gorge; it was reserved only for a few picked races to effect a passage successfully and reach the rank of capitalist societies. Of them we may say *ad augusta per angusta!*

II. The Meaning of the Productivity of Capital.

As a general rule the part played by capital in production is not accurately understood.

People imagine that all capital yields a revenue in the same manner as a tree bears fruit or as a hen lays eggs; *i.e.* that the revenue is a product made exclusively by capital, and then possessing a separate existence. What largely aids in the propagation of this false notion is the fact that the greater part of capital is seen by us in the shape of government securities, shares, or debentures, from which, according to the customary formula, coupons are detached which stand for the revenue. For six months, three months, or a year, according to the nature of the stock, the coupon grows; when the day of payment comes, it is ripe and can be detached.

Furthermore, just as after a fruit or a seed has been gathered, it can be sown again, and a fresh plant be formed to bear more fruit, just as after an egg has been laid it can be put under a sitting hen, and a chick be hatched in its turn to lay more eggs, — so by investing this coupon at interest a new capital can be formed which will yield new dividend coupons for interest; in this manner men imagine that they see capital growing and reproducing itself in accordance with the same laws as regulate the reproduction of the species of the vegetable and animal kingdoms. But the law of *compound interest* is wonderful in quite another fashion than the increase of herrings or of mushrooms, which is so often quoted with reference to the theories of Malthus and Darwin. A mere farthing put out at compound interest on the first day of the Christian Era would have yielded by now a value equal to that of some thousand millions of globes of solid gold of the volume of our earth: the example has become classic.

We must pack off to limbo all this phantasmagoria which so strongly and so naturally stirs the bile of the socialists. It is all pure moonshine, this attribution to capital of some productive and mysterious power peculiar to itself alone; this generative faculty is a mere figment. Whatever the popular saying may assert, money bears no children;[1] no more does capital. Not only has

[1] We may compare with this the saying of Carlyle: "Were a pair of breeches ever known to beget a son?" (*Life in London*, I, 193, letter to Sterling, on the Church.) — J. B.

a bag of gold pieces never produced a gold coin, as Aristotle observed long ago; but a bale of wool or a ton of iron has never borne a flock of wool or an atom of iron. If sheep do reproduce other sheep, as Bentham said, imagining that he refuted Aristotle by saying so, it is not because sheep are capital, but merely because they *are sheep;* for nature has endowed living beings with the power, never enjoyed by capital, of reproducing individuals similar to themselves. But capital is dead matter, and is absolutely sterile; it enables labor to produce, but of itself produces not a jot. Therefore all that men call the revenue, or the product of capital, is, in reality, only the product of labor.

The illusion is caused by the sight of many people living on their income without working, and even rapidly increasing their fortune. We ask, Whence does this income spring? It is certainly not the product of their labor, for they are engaged in no industry or occupation; nor is it from any natural agency, for on the terms of the hypothesis they are not landowners. Can it not, then, perhaps, proceed from capital itself which would thus spontaneously produce it? In reality, this income is altogether the product of labor, of labor which is not seen, but can be readily traced if well sought for; it is the labor of those who have borrowed the capital of the fundholders and have employed it productively. The interest coupons of colliery shares or debentures in coal mines represent the value of tons of coal extracted by the labor of miners, and the coupons of railway shares or debentures stand for the results of the joint labor of all who have co-operated in the transport of commodities. It may come to pass that capital, after reaching the hands of the borrower, has been wasted or unproductively consumed; yet in that case the interest received by the lender represents the product of some labor, if not that of the borrower, at least that of some third party. For instance, the coupons of government bonds and securities do not betoken wealth produced by the laborer or the industry of the State, for the State does not produce, and is wont to spend unproductively most of the capital lent it; no! these coupons stand for the

product of the labor of all citizens, which in the shape of taxes has been yearly poured into the treasury chests, and has thence passed into the hands of stockholders.

Thus what we wanted to prove stands thus: the receipt of a fixed income is simply the levying of a quota on the product of some one's labor, a levy which may perhaps be justified by the assistance capital has afforded labor. But that is not the point in question.

III. The Distinction between Wealth which is Capital and Wealth which is not.

The idea of capital is clear enough to us all. In looking over our property we at once perceive that it can be divided into two classes of goods. Those in the first division are destined to obtain for us in a direct manner some enjoyment or some satisfaction; *e.g.* food, clothing, dwelling-houses, ornaments, riding-horses, pleasure parks, pocket-money. The second category comprises objects whence we obtain an income; such as farms, places of business, docketed securities, factories, machines, tools, stock in trade. We make use of the former for our personal ends, or for our family requirements; from the latter we try to get profit. For this last-named category of wealth we reserve the name "capital." This distinction between wealth which is capital and wealth which is not appears to be very simple. But when we look at it closer, we find that it bristles with difficulties, so that the definition of capital presents one of the most arduous problems in political economy.

We must begin by remarking that a great number of objects which have different properties, and therefore varied utilities, can figure equally well under either of the two classes, according *to the use to be made of them*. Thus the determination whether an object is, or is not, to rank as capital often depends far less on the object's nature than on its destination.

A diamond is capital when used by a glazier for cutting panes

of glass; it is not capital when set in a ring or an earring. In the first case it is employed on account of its hardness; in the second because of its brilliancy. An egg is capital when given to a hen to hatch for the reproduction of chickens; it is not so when put into a frying-pan to make an omelet. In the one case we use the life-giving power which it contains in the germ state; in the other we only avail ourselves of the nutritious matter it is composed of. Coal is capital when thrown into the furnace of a steam-engine, for the utilization of the motive force it contains in the latent state; it is not capital when stirred on a hearth-grate merely for the sake of giving us warmth. There is no need to give further instances of these contrasts, which might be indefinitely multiplied. We might almost say that there is no product which cannot, somehow or other, be applied for a twofold end.

This is particularly the case with a highly important class of products: all those which under the shape of victuals, clothing, shelter, or any sort of provisions, tend to support man's productive strength. These also are of twofold application, and according to circumstances are or are not capital. For the laboring man, food is surely no less indispensable for the act of production than are tools or raw material; the nitrogen and the carbon (which he consumes as meat or as bread) play just the same part as the coal which is burned in a steam-engine, and are themselves transformed into muscular force. Therefore all food, when regarded as *victuals*, stored for future use, is placed by most economists under the head of capital. On the other hand, has any one dining at a restaurant or in the bosom of his family ever regarded the dishes appearing during the course of the meal, were they even in the shape of tinned meats, as implements of production and as fuel for his bodily mechanism? No! he only desires them to appease his hunger or to tickle his palate.

Stanley Jevons asserts that stores of food are typical capital, and are its essential and primordial manifestations whence all the other forms have sprung. Indeed, his premise is, that the true function of capital is to support the worker while waiting for the

moment when his labor can give good results. This definition of the function of capital necessarily requires it to exist under the shape of means of subsistence, of *advances*. Of these, all tools, machines, railways, etc., would be only derivative forms, for their production takes some time, perhaps a considerable period; and hence they must have required a previous amount of advances in the shape of stores of food. It is to this primary form, therefore, that we have always to return.

The simplicity and elegance of this theory make it attractive. Nevertheless, though we have previously expounded and defended it in the *Journal des Économistes*, October, 1881, we now think that it is rather too exclusive. Time certainly forms one of the essential conditions of, or, say, a limit to, every act of production. (We have already dwelt on this fact.) Still, it does not seem correct to draw from this the conclusion that all productive labor necessarily demands a certain advance in the shape of food. Man did not put off entering on agricultural pursuits till he had stored up provisions to last for a year; he had sown and tilled the ground in the interval between his hunting expeditions. Before attempting to pierce the Isthmus of Panama, the Company did not amuse themselves with heaping together eatables to feed an army of laborers for eight or ten years. They had to live on the supplies furnished *pari passu* by the labor of the rest of mankind. Nothing, either in primitive or in civilized societies, resembles these vast hoardings of food which Stanley Jevons regards as capital *par excellence;* on the contrary, the whole of the provisions of a country is produced day by day. Besides, it is not our opinion that the only function of capital is to maintain the worker till his labor gives actual results. The flint picked up and cut by quaternary man, the ox yoked to the plough by the first agriculturist, certainly did not fulfil that function, but nevertheless they were decidedly capital.[1]

[1] See Dr. Böhm-Bawerk, *Kapital-Zins*, Vol. II, Bks. iii, iv, ii, D, pp. 337 *seq.* (*Smart*, pp. 319 *seq.*), compared with Bks. i, iii, 61 (*Smart*, p. 57). — J. B.

Another distinction which is often employed in popular speech has been adopted by Professor Walras (as it was by his father), — the distinction between *what is lasting* and what is consumed on the first time of using. From this point of view we should reckon under the head of capital heavy family furniture and jewels. This criticism can hardly be deemed scientific; were it adopted, we should have to erase from the list of capital coal, which is consumed on the first time of using, and is certainly the typical capital used by modern industry, and the place of honor would be filled by the great Pyramid of Egypt, whose only use has been to preserve a mummy or two. This question of durability will recur in the next section, when we distinguish between fixed and circulating capital.

To return from this digression. Let us consider those objects which under no circumstances and in no shape could be used for production; *e.g.* jewelry, lace, pictures, theatrical costumes, fancy ball-dresses, expensive carriages and horses, tobacco or absinthe, photographs and novels; even these, if we take a subjective or individual standpoint, may be regarded as capital, and are so regarded every day of our lives. For are there not sellers of all the products just enumerated? Are there not goldsmiths, dress-makers, costumers, furniture-dealers, horse-dealers, photographers, book-sellers, tobacconists, and publicans? Do not they all regard the goods which fill their places of business as their capital, and are they not justified in so doing, inasmuch as such articles are the instruments of their industry, and furnish them with their income?

We are therefore led to divide capital into two species: capital which really serves to produce new wealth, "productive" capital, as we shall term it; and capital which merely yields an income to its owner, or "lucrative" capital, as we shall designate it. This epithet has been accepted by Dr. Böhm-Bawerk (see, in the *Revue d'économie politique* for March and April, 1889, an article on "Une Théorie nouvelle sur le capital"). Thus, every article of wealth, even a fancy-ball costume, or carnival dress, may act as lucrative

capital by means of hire or trade; whereas the wealth, that from its very nature can be used as productive capital, is limited in extent.

In the first edition of this work we passed in review the various kinds of wealth, and discussed their respective rights to the name of capital. We have felt obliged to omit that long excursus, which merely turned on questions of definition, and to content ourselves with the general idea set forth in the present text. But a few kinds of wealth require a more special explanation.

In popular speech, the term "capital" is applied (in contradistinction from real property) to all movable effects such as stocks, shares or debentures in industrial companies, mortgages, notes of hand, etc. Such goods are really not productive capital in the scientific sense; nor are they true wealth, seeing that they are merely liens on other people's property. No doubt they yield an income to the holders; but the income gained by the creditor is taken from the debtor's pocket, so that the country is none the richer by the transaction, unless, indeed, the shares are foreign ones. In this case, to avail itself of such property, the country takes up the same position as any private investor.

Inversely, every day language never gives the appellation of "capital" to real property, such as *lands* or *houses*. Yet there are cases in which they fully deserve that title. We ought never to call land capital when we are speaking of virgin soil, the primary stock granted us by nature, — for that would be *to confound nature with capital*, — but from the time that this soil has been modified by man's labor, and appears in the shape of land which has been cultivated, opened out, enclosed, planted, irrigated, and so forth, it falls perfectly well under the definition of capital; for it is a product of nature and of labor, and undeniably serves for the production of new wealth. Houses, again, are only "lucrative" capital when used as dwelling-houses, but they are "productive" capital when in the shape of buildings for production; *e.g.* farms, factories, or shops.

Popular speech is correct in giving the name of capital to

acquired capacities, to the knowledge needed for certain professions, and to education in general.[1] Obviously we must beware of classing as capital those personal qualities and faculties which are only one of the forms of human activity; for that would *confound labor with capital*. But as soon as man's natural faculties have been modified and worked on so as to take the shape of acquired knowledge, they can then be termed productive capital; for in that case they are the product of nature and of labor, and clearly serve in the production of new wealth.

Money, or *coin*, in its capacity of instrument of exchange, ought to rank as "productive" capital, certainly not in a high place, but at least on a par with weights and measures, balances, etc., and all other means of facilitating exchange. For a country to be in a position to produce, it requires a certain amount of money, just as it needs a certain number of carts. From the subjective or individual point of view money is only lucrative capital, when it is employed for purposes of profit, and it is not capital at all when it is merely spent.

IV. The Durability of Fixed and of Circulating Capital.

Capital may last for more or less time. According as its durability is longer or shorter, it will serve for a larger or smaller number of acts of production.

The name "circulating" is given to capital which can be used only once in consequence of its disappearance during the very act of production; for example, corn which is sown, manure which is buried in the soil, coal which is burnt, cotton which is spun. The name "fixed" is applied to capital which can serve for several acts of production: it includes the most fragile implements, such as a needle or a sack; and the most durable, such as a tunnel or a canal.

It is right to remark that Adam Smith, who first employed these terms, "fixed" and "circulating" capital, used them in a somewhat different sense. He understood by circulating capital that

[1] See above, p. 41 (Note on Immaterial Wealth). — J. B.

which gave an income only on condition of its circulating, *i.e.* changing hands or being exchanged, *e.g.* commodities and money; that capital was fixed which returned an income without being exchanged and while remaining in the same hands, *e.g.* a factory. On this theory we should be compelled to say that coal burnt in his furnaces by a manufacturer is fixed capital, for it is not intended for sale; whereas houses, the property of a building society, which buys them to sell them again, should be regarded as circulating capital. In other words, to Adam Smith the essence of circulating capital lay in the *change of ownership;* in the definition we have adopted, it is to be found in the *change of nature.* Adam Smith took the subjective or individual standpoint; we take the objective and social point of view, just as we did when defining capital itself.

When the capital has a sufficiently great durability and can serve for a good many acts of production, it is not necessary, for its employment to be productive, that a really large amount of labor should be economized in each act of production. However small this saving may be, yet as it is repeated at every act, it soon reproduces the value of the expended capital or the amount of labor spent in producing the capital. Once that is done, the capital is redeemed, to use the time-honored expression; that is to say, after this all the aid it grants labor is gratuitous; henceforward the labor economized is a net gain for society. It is thus that an aqueduct, a canal like that at Suez, or a tunnel such as those through the Alps, can last as long as the shape of the continents. However large, then, be the labor required for their construction, and however small be the amount of labor annually saved by their instrumentality, the time will necessarily come when the labor saved will equal the labor expended. Starting from that date, and enduring for all the centuries still destined for humanity, the service rendered by capital will be henceforward gratuitous. Capital of great durability is therefore usually more advantageous than the other kind, and the progress of civilization constantly tends to replace the less durable by the more durable capital.

Still we must not forget: *Firstly*, that the formation of such capital requires the more labor the greater the durability is to be; and that consequently there is a balance to be preserved. But this increase in the amount of labor expended is not generally proportional to the greater durability which is obtained, and this very circumstance renders profitable the employment of such capital.

Secondly. The formation of fixed capital demands a present and immediate sacrifice in the shape of a large amount of labor or of expenses, while the remuneration which is destined to accrue in the form of economy of labor or of expenses is very remote, and is the more distant in proportion to the durability of the capital. If the construction of a ship canal, such as the Panama Canal, for instance, is to cost eighty million pounds sterling, and will not be paid off till the lapse of fifty years, we must weigh against that an immediate sacrifice; to wit, the disbursement of that large sum, with a return for it for which we shall have to wait half a century. Now, to make up such a balance, men must be endowed to a high degree with the power of foresight and with boldness, and have a remarkable trust in the future, — conditions which are only found united in very civilized communities.

Thus it is that very little fixed capital is employed by peoples whose social state is not advanced, and whose political constitution affords only a slight degree of security. All their wealth takes the shape of articles of consumption or of circulating capital. A good example of this is presented by a comparison of the principalities of India or Mussulman countries at large with our own European societies.

Yet, however great be this faculty of foresight, even in the most favorable circumstances, it will not exceed certain limits. For example, a private person or a company, or even a State, would never consent to advance capital which would not be paid off until the end of two centuries, even though that capital might last for a thousand years, and thus be capable of rendering gratuitous services for a clear eight hundred years. Why? Because results

which are not to be produced till the end of so long a period do not fall within the scope of human predictions. It may, therefore, be laid down as a rule, that the employment of any capital which cannot repay itself in the course of a century at the very outside is not to be regarded as productive.

Thirdly. Another disadvantage of fixed capital may lie in the fact that if its durability is too great, it runs the risk of becoming useless in the long run, and therefore great prudence must be exercised in the predictions just alluded to. The material durability of capital is of little importance ; what alone is of interest to us is the lasting nature of its utility. Now, in certain conditions, we can reckon on the former ; there is never the same absolute certainty as to the latter. We know that utility is unstable, and that at the end of a certain time what was thought to be the most firmly established may be called upon to disappear. We have no guarantee when we pierce a tunnel or excavate a canal that traffic, a century or two hence, may not take another route. Now, should such a revolution in affairs take place, and the capital sunk in the tunnel have not yet been redeemed, its value will be rendered *nil*, and a certain quantity of labor will have been uselessly expended. Being conscious, then, of our ignorance of the future, it is prudent not to build for all eternity ; and from that point of view the use of too durable capital must be regarded as a hazardous enterprise.

V. How Capital is formed.

Capital being acquired wealth can, like any other wealth, be formed only by the two original factors of all production, — labor and nature. (Karl Marx's phrase that capital is "crystallized labor" would be accurate did he not purposely omit the part played by nature in the formation of capital, always adhering to his principle that all value springs from labor alone.) It is enough to run through the list of all the kinds of capital we can think of, — tools, machines, works of art, and materials of all classes, — to be satisfied that they can have no other origin than that just mentioned.

We need not have stopped at so clear a matter as the formation of capital had not some people thought fit to see in the process a new agent of a special nature, which they call *saving*. From this, they say, all fortunes arise. Now, what is this newcomer? Is it a third original factor of production, which we have perhaps forgotten? No. Labor and the forces of nature are the only conceivable factors. Is it, then, a form of labor? Some people think so. But what is there in common between the two processes? To labor is to act; to save is to abstain. This opinion that saving is "only a form of labor" is held by M. Courcelle-Seneuil, and is set forth in the article on the subject in the *Journal des Economistes* for June, 1890; but as the author himself confesses that the only object of the theory is to justify the social function of capitalists and the services they render, we need not stop to discuss it.

From a logical point of view, it is impossible to conceive how a purely negative act, a simple abstention, can *produce* anything. It is useless for Montaigne to say that he "knows no action so potent and effective as this inaction." That may be true in morals, but it does not explain how this inaction can create even a pin. When wealth is said to have been created by saving, the only meaning is, that if this wealth had been consumed as soon as born, it would not be existing still. That is obvious. But according to such reasoning, we should have to allow that an object is produced each time we refrain from using it; and *non-destruction* would have to be reckoned as one of the causes of *production*, a curiosity of logic, to be sure. If a child asked whence chickens came, and was told that to produce chickens he must refrain from eating eggs, we should be justified in regarding the answer as an excellent advice, but as an exceedingly absurd explanation. We are not a whit better satisfied by the train of reasoning which makes saving the original cause of the formation of capital.

This idea has taken its rise from the employment of money. In our modern societies "to save" means to put in reserve a certain quantity of money. Now the man who places pieces of money in a drawer most certainly creates neither wealth nor capital (for,

on the contrary, he withdraws some wealth from circulation) ; but since each coin stands for a sort of ticket which gives its possessor the right of levying an equal value on the mass of existing wealth, it is clear that the man who accumulates these pieces of money creates wealth for himself just as if he was producing it by his own labor. But that is entirely from the individual point of view.

Hoarding, in truth, is applied to money, but apart from that it is doubtful whether saving has ever produced any capital. The stone axe cut by quaternary man was doubtless not the result of saving. Certainly for its fabrication man must have succeeded in obtaining the requisite amount of leisure, and in withdrawing himself from subjection to every-day labor. But were these leisure hours afforded by saving in the shape of unconsumed and stored-up provisions? On the contrary, it is probable that early man was as little inclined to limit his consumption as the unskilled laborer of to-day, who only earns just enough to keep himself from starving. No doubt he produced his first capital at the end of a successful hunt which had brought him in more than usual, or only in his spare moments. Are we to suppose that to effect their passage from the hunting to the agricultural state, tribes had first of all to save enough food to last them for a whole year? Nothing is less probable. They only domesticated their cattle, and this, their earliest capital (*cheptel*), combined with a freedom from providing for the morrow, first gave them the leisure necessary for long undertakings. But, as Bagehot well asks (*Economic Studies*, "Growth of Capital," pages 166, 167), how does a herd or flock represent any saving? Has it entailed privations on its possessor? On the contrary, thanks to the milk and the meat, he has been better fed ; thanks to the wool and the hide, he has been better clothed. After all, we are not dreaming of impugning the importance or the utility of saving ; we shall come to it again when we deal with the use that should be made of wealth. But though saving plays an important part in consumption, it has nothing to do with production. That is not its sphere of action.

Is there such a thing as a social organism?

Part II. — The Social Conditions of Production.

THE SOCIAL ORGANISM.

Up to the present we have studied production as it might have been seen to act on Crusoe's island; *i.e.* production effected by man in isolation.

But that is merely the hypothesis of a novelist; for man is a sociable being, and production is always more or less collective work. It is no longer individual, but collective production that we must now examine. This social production is, in the first place, subject to all the conditions of individual production previously discussed; viz., environment, ground, time, raw material, etc.; for it can employ no other agents or instruments than those already familiar to us, — labor, land, and capital; but besides these it is regulated by other conditions which are peculiar to it, and are bound up with the mere circumstance of life in common.

These conditions or modes of organization of social production are four in number, — Association, Division of Labor, Exchange, and Credit.

These are not actually four different and distinct modes of organization; for they overlap at many points. Credit is only a particular form of exchange; exchange necessarily presupposes division of labor, and that, in its turn, an association of some kind, whether conscious or unconscious. But the converse is not true.

Association may exist without division of labor, when each member of the association joins in the common work in the same manner and by the same acts, *e.g.* workmen raising a weight, rowers at their seats, sailors turning the capstan. Division of labor, in its turn, may occur without exchange, as in the bosom of a family, or within a workshop. Again, exchange is perfectly

independent of credit, which is, indeed, only organized in a small number of societies. Association, division of labor, exchange, and credit appear then as successive forms in the organization of social production, and respectively increase in complexity.

We might be disposed to believe that these conditions of social production, unlike those studied in the preceding Book, have no necessary or even natural characteristics, and might be inclined to regard them as the result of arrangements which are more or less ingenious, but are still artificial and accidental. But that would not be a correct view of the matter. These relations of association, division of labor, exchange, and credit, in spite of the endless varieties of form they may assume, are by nature necessary, universal, and permanent. They arise spontaneously at all times and in all countries, without any previous concert or premeditated deliberation. They are found in some shape or other in regions which are far beyond the pale of political economy, and even in the laws that govern the evolution of all living things.

Edgard Quinet, in *La Création*, remarks: "On the one side the school of the historians, on the other the men of science, have each done their work separately without knowing one another and without a mutual understanding; yet this work proves to be one and the same. If I dare to say so, this meeting is the greatest intellectual event of our time."

Men of science, in fact, teach us that each living being is itself an *association* of millions or thousands of millions of individuals, — more numerous, therefore, than the largest human societies, — infinitely small individualities, which, as Claude Bernard says, "are united but yet remain distinct, like men holding one another by the hand."

They tell us, too, that each organized being is subject to the law of the *physiological division of labor*. In very low organisms all the functions are merged together in a shapeless and homogeneous mass; but as the scale of organization rises, the various functions of nutrition, reproduction, locomotion, etc., become differentiated, and each comes to possess a special organ. In fact,

we may say, the more divided is the physiological labor, the higher is the rank of the organism. "This division of labor first dwelt on by political economists as a social phenomenon, and thereupon recognized by biologists as a phenomenon of living bodies, which they called the 'physiological division of labor,' is that which in the society, as in the animal, makes it a living whole. Scarcely can I emphasize enough the truth that, in respect of this fundamental trait, a social organism and an individual organism are entirely alike." — HERBERT SPENCER, *Principles of Sociology* (3d ed.), Vol. I, page 440.

We learn, too, that each living being is the seat of a perpetual movement of *exchange and circulation*, an exchange of services and even of materials; for it is impossible for a function of the organism to become specialized in one single organ, as we have just seen, unless the other parts also fulfil other functions which are essential to life and communicate the ensuing benefits to the first-mentioned organ. "A respiratory surface to which the circulating fluids are brought to be aerated can be formed only on condition that the concomitant loss of ability to supply itself with materials for repair and growth, is made good by the development of a structure bringing there such materials." — HERBERT SPENCER, *Principles of Sociology* (3d ed.), Vol. I, page 439. Indeed, Herbert Spencer remarks that, "the entire class of men engaged in buying and selling commodities of all kinds, on large and small scales, and in sending them along gradually formed channels to all districts, towns, and individuals, — is along with these channels fulfilling an office essentially like that fulfilled in a living body by the vascular system." — *Principles of Sociology*, Vol. I, page 484.

Finally, they inform us that *credit* itself is indispensable for the due working of living beings as it is for that of the social organisms. For, as Herbert Spencer says (*Principles of Sociology*, Vol. I, pages 533, 534), "If an organ in the individual body or in the body politic [is] suddenly called into great action — that it may continue responding to the increased demand, there must be an

extra influx of the materials used in its actions; it must have *credit* in advance of function discharged. In the individual organism this end is achieved by the vaso-motor nervous system; . . . through the vaso-motor nerves going to all inactive parts there is sent an influence which slightly constricts the arteries supplying them thus diminishing the flow of blood where it is not wanted, that the flow may be increased where it is wanted."

Perhaps these analogies between social and biological laws may have been somewhat exaggerated [they have been carried to the minutest detail in Herbert Spencer's *Principles of Sociology*, Vol. II, and Schäffle's work on the *Bau und Leben des sozialen Körpers*]; but they are striking enough to justify us in regarding these modes of social production as manifestations of a real natural law.

CHAPTER I.

ASSOCIATION.

I. The Various Forms of Association.

"To-day, Good Friday," wrote Fourier in 1818, "I have found the secret of universal association." He certainly had not discovered it, though he set it forth with remarkable vigor; for association is not one of those phenomena that require discovery. As we have already proved, it is a natural law, perhaps, indeed, the most general of all those which obtain in the universe; for it governs not only the relations of men living in society, but also those which unite the worlds in the solar systems, the molecules or the cells in the inmost constitution of lifeless or organized bodies, and even the logical relations which rule our thoughts. The very animals are acquainted with association, and some of their societies have always had something to teach men and something to excite their wonder, *e.g.* the bees, the ants, and the beavers (see M. Espinas' fine work on the *Sociétés animales*).

Association is indispensable for all labors which are too great for individual strength, were it only the raising of a weight. It was by this co-operation that men of olden times were able to erect the Cyclopean walls, or the Pyramids of Egypt, and to move galleys with three or four banks of oars; Egyptian *bas-reliefs* show us hundreds of men attached to a single rope, and moving in harmony with the rhythm of a brass instrument.

In our days, this massing of individual strength has been in one way rendered less necessary by the use of machines, for they of themselves are equivalent to the resultant of hundreds and thousands of arms; but, on the other hand, by making possible the creation of large works, they have caused association to be

still more indispensable. Moreover, even at the present time, there are many labors which can only be executed by a joint body of workers, — from the fishing-smack, which requires a crew of at least two or three men, up to the canals of Suez and Panama, which set in motion whole armies of laborers.

Again, in modern societies association is imperative in consequence of the manner in which the elements of production are distributed amongst men. We know that the requirements for every productive enterprise are a certain extent of ground, some capital, and, above all, some labor. Now these several elements are rarely united in the same person. I mean to say that it is not usual for one and the same man to be able to supply at the same time the personal labor, the land, and the capital that are necessary for production. This, indeed, may occur in small industries; for instance, the peasant may cultivate his own field solely by the use of his arms and little savings, and the same applies to the artisan and small shopkeeper who earn their living entirely from their own resources, but the usual run of matters is far different.

Our modern societies are divided into two classes: into those who possess the instruments of production in the shape of land or capital, and those who have nothing but their arms; that is to say, their labor. As neither one class nor the other is capable of producing aught separately, — for labor without instruments and instruments without labor are equally useless, — there necessarily arises *an association between landowners and capitalists on the one side, and laborers on the other side.* But at one time and another this association between landowners or proprietors in general and men of the people has taken very different forms, and the development of these successive forms is one of the fields best suited to the exercise of the historical method.

In its beginnings, this association was *compulsory* and forced, and was called slavery. All productive labors were carried out by men of alien race and vanquished peoples, who were grouped under the absolute sway of a master, and were kept by him on his estates or in his house.

The coercive nature of this first method of productive co-operation was gradually softened down by the transformation of slavery into the Roman *coloniæ*, or into serfdom, and has almost disappeared under the present wages-system, which groups together in huge factories hundreds and thousands of men who are under the authority of a master. But they are free men, free to come and free to go. Yet in spite of this freedom, which, by the way, exists in theory rather than in practice, this mode of association is far from being a perfect association or partnership. Neither in legal phraseology nor in popular speech is the term "partnership" applied to this form of association, and our use of the word may astonish the reader. Here, indeed, we have a partnership in fact, but not in law, which is for *production and not for distribution*. The workmen do not in the least feel that they are their master's partners; and, as we shall see later on, that is one of the vices of the wages-system.

In politics evolution appears to have passed through the successive phases of absolute monarchy, constitutional monarchy, and republic. The evolution of economics would seem to correspond, stage by stage, with the political evolution; for its forms have been, first of all, a rule of coercion, then a system of masterdom; then the same employer-*régime*, tempered, however, by profit-sharing and a certain scope allowed the workmen in the carrying on of the business, or at any rate, in the management of superannuation funds, etc., and finally the co-operative form.

Now the coercive form of industrial enterprise in the past and the monarchical form which it still retains at the present day, may have been necessary for the proper discipline of labor and to compel men to co-operate in the work of production. But they, probably, will not be final, and just as the first gave way to the second, so will the latter in its turn be succeeded by a perfect form of association, which will be free and complete, extending to distribution as well as to production, and in which every man will have the clear knowledge that he is sharer in a collective work, and the firm will to co-operate therein. For this reason we must

hold that social evolution in this matter is tending towards businesses in which profit-sharing is practised, and, better still, to co-operative associations of production, though both these forms are still in a very minor position. Reference may be made to Hertzka, *Die Gesetze der sozialen Entwickelung;* Lange, *Arbeiter-Frage;* Metchnikoff, *La Civilisation et les grandes fleuves historiques;* Secrétan, *Etudes sociales,* and the author's paper on "L'Avenir de co-opération" in the *Revue socialiste* for June 15th, 1888.[1] But this view has been sharply attacked by most economists of the classical school (Mill excepted), and even by some of the chief of the historical school; *e.g.* by M. Lujo Brentano.

Let us leave this forecast of the future and survey of the past, and look to the present. In modern society production is organized in the form of *businesses* (*entreprises*); that is to say, free groupings of a larger or smaller number of persons, one of whom, the *master* or *employer,* supplies the capital, the implements, and the land, whilst the others, the wage-receivers, contribute their labor. But whenever the business assumes considerable dimensions, — and that, we shall see, is the current tendency, — it frequently happens that one man alone cannot furnish capital which shall be both enough and in proportion to the number of laborers. In that case capitalists have to combine to get together the necessary amount of capital, and the business is turned into a joint-stock company, a plan which has found extraordinary favor of recent years and which is in process of supplanting the old form of business carried on by individual employers. The study of the other forms of companies, liability companies, and so forth, are matters of commercial law.

The joint-stock company has the especial advantage of being exclusively an association of capital. Now capital, in striking contrast to the two other elements of production, land and labor,

[1] See also Professor Gide's paper, "De la Co-operation, et les transformations qu'elle est appelée à realiser dans l'ordre économique" (address given to International Co-operative Congress, Paris, September, 1889, and published in *Revue Economique* of same date). — J. B.

is especially adapted for association, in consequence of certain characteristics which are peculiar to it; namely, its *divisibility* and its *mobility*.

To begin with: capital can be divided into fractions (or portions) to an indefinite extent; hence each capitalist is able to limit his share in the company, and consequently, his risks, as far as he thinks proper. It is to this that joint-stock companies owe their success; for as each share is for £20, or often even less, capitalists may take as many as they wish, according to their respective fortunes and the degree of confidence they have in the enterprise.

This divisibility of capital also permits of the starting of colossal and extremely hazardous enterprises, which would be impossible without its aid. No capitalist, however rich he might be, would have dared to supply the £80,000,000 sterling required for the piercing of the Isthmus of Panama, in consequence of the extreme risk; but now that such risks have been divided *ad infinitum* among the members of a company, they have ceased to frighten any one.

Further, capital enjoys a wonderful facility of transferability, which is daily increased by the development of credit institutions. In order that laborers or proprietors may be able to co-operate in any productive undertaking, that enterprise must be formed on the very spot and can only bring together people living in the same neighborhood. Labor is not easily moved; land cannot be moved at all; but capital has eagle's wings, and flies from the very ends of the earth to any place where there is a prospect of profit.

But there are grave disadvantages in this form of association which prevent us from believing that it will preponderate in the future, as some economists predict, notably de Molinari in his *L'Évolution économique au XIX^e^ siècle*. The very fact that it associates only capital, and does not combine persons, is a mark of its inferiority. The shareholders are not acquainted with one another, and frequently know nothing of the concern of which

they are supposed to be members, save its name, which they read on the stock which they keep docketed at their bank or locked up in their safe. There are two sets of persons in the joint-stock company: firstly, the shareholders, who are partners in the distribution, but not in production; and secondly, the wage-receivers, who are united by the fact that they produce and labor in common, but who are not partners as regards distribution. The former share the produce of a business in which they do not work; the latter work in a business the fruits of which they do not receive. Such a position is not at all conformable to true morality, and its equilibrium is distinctly unstable.

Combine these with lecture notes on this

II. The Advantages and Disadvantages of Large Production.

In the mechanism of production, as we have just shown, there is a daily tendency for the collective to more and more supplant the individual form. In old days, the greater part of wealth was produced by individuals working apart, — artisans, as they were called. They were united, it is true, far more than they are nowadays by the bonds of professional corporations. But these corporations possessed the characteristics of productive enterprises not a whit more than do our present professional syndicates; and each artisan worked at home, either alone or with a few apprentices. Now, however, the greater part of wealth is produced by groups of men of various numbers, and often by actual industrial armies engaged in laboring collectively. (Ten to fifteen thousand workmen apiece are employed by the Anzin Mines Company, the Krupp Gun Foundry, and by the Creusot Iron Works. One great railway company, such as the *Paris-Lyon-Mediteranée*, has as many as sixty thousand men.) This evolution of small production towards large production is one of the characteristic features of the day, and is the principal argument relied on by the collectivist school in the statement of its position. According to this school, this evolution, which is constantly

tending to swallow up individual in collective production, is destined to end in absorbing all individual enterprise in the most vast of all collective enterprises; *i.e.* in that which is carried on by the State or Society.

The accomplishment of this evolution must result not merely from some sort of fatality, but from some incontestable advantages from the point of view of production. What are these advantages? First of all, collective production alone permits of certain undertakings, which, whether from their extent or by reason of the time they take, far exceed the limits of individual strength and individual existence. But even in those enterprises which would not actually overtax individual capacities, collective production possesses a marked superiority.

When we group together all the factors of production, — viz. manual labor, capital, natural agents, and situation, — a certain economy is effected; that is to say, the same quantity of wealth is produced at a smaller cost, or what comes to the same thing, more wealth is produced at the same cost.

Firstly, economy in labor. This first advantage arises in particular from the possibility of establishing an improved division of labor, as will be noted presently. But it also results from the mere grouping together of workers. Among small producers much time is lost. Each man's hours of work are often unfilled. Take a hundred business houses, each of which employs ten men. Suppose we merge them into one. It is clear that they will not be obliged to keep all their *employés* in order to do business at a figure equal to that of the hundred separate establishments. Obviously there will be no need for a hundred cashiers or a hundred book-keepers. As henceforward each *employé* will be able to work continuously, he will be able to do two or three times the amount of work, and consequently will stand for two or three men working on the old system.

Secondly, economy in situation. To obtain a hundred times more room in a shop or a factory, it is not necessary to occupy a superficial area a hundred times as large, or to employ a hundred

times the amount of material in building the premises. The simplest calculation shows that when the volumes of two cubes are as 1 to 1000 their surfaces are as 1 to 100. Now, it is only these surfaces that cost money. Putting aside all mathematical methods, every-day observation shows that the cost of a building or the rent of a house does not increase in proportion to the amount of room occupied. The smallest shop in Paris which only does £4 worth of business a day will pay a rent of from £200 to £240. But the rent of the Bon Marché, which sells £4000 worth of goods a day, and therefore does a thousand times more business, is not a thousand times larger, which would make £200,000 to £240,000, but is only £16,000. — De Foville, *Des Moyens de transport.*

Thirdly, economy in natural agents. A powerful steam-engine consumes, relatively speaking, far less coal than a weak one. The difference runs from as much again to ten times as much again. Electric lighting is more economical than lighting by gas when used for large areas, but it is ruinously dear on a small scale.

Fourthly, economy in capital. A large shop which does a hundred times more business than a small one is not obliged to keep in stock a hundred times the quantity of goods. It is enough for it to have ten times more, and to take in a fresh stock ten times a year. Thus a sinking of ten times the capital brings about a hundred times the business. Moreover, the consumer will be better suited; for in consequence of this frequent stock-taking the goods will be newer and more fashionable.

Further, wholesale purchasers obtain better bargains than small buyers. Thus the large shop or factory which takes in stock in great quantities effects, in this item too, a considerable saving on the capital it employs. Indeed, it has been calculated that, in consequence of the combination of all these causes, the general expenses of an ordinary novelty warehouse are 40 per cent, while those of a large establishment like the Bon Marché are only 14 per cent. In other words, the very articles that can be sold at the Bon Marché for £4 11*s.* cannot be sold for under £5 12*s.* at a small shop (see De Foville).

Now, are there nothing but advantages in this evolution towards large production? No one but the most sanguine of optimists could think so. Were this evolution brought about solely by the means of perfect association, by the progressive substitution of associated for isolated labor, we might perhaps be able to see in it nothing but advantages. Even then, however, if the result of the development of collective organization was to weaken and relax the stimulus of individual initiative and responsibility, like springs which rust for want of use, we might justly express some fear, or at any rate some regret.

We have stronger reason for concern when we see this evolution taking the shape of large businesses under private employers or under joint-stock companies; that is to say, the progressive substitution of *hired* employment for *independent* labor. Were this movement to continue to advance at the rate it now does, we should have to look forward to the disappearance from the sphere of economy of all workers on their own account, — small artisans, small shopkeepers, small proprietors, — and should see them reappear as wage-receiving laborers, clerks, and officials, working in the interests of other people or for shareholders. Neither from the economical nor from the moral point of view should we have reason to congratulate ourselves on such a change of position. That would be rather too high a price to pay for economy in general expenses. The collectivists hope that the State or district communities or parishes will gradually take the place of employers or shareholders, and that thus private businesses will be metamorphosed into "public services." But a man gains very little (if at all) by being employed by the State or by his parish instead of by a private master, and our objection still holds good. Let us rather hope that these large businesses will one day be the property of the laborers, who will be enriched together, and will thus return to the position they held when small industry was in vogue; *i.e.* they will be the owners of their implements of labor, and will produce on their own account. Perhaps, too, if electricity enables motor force to be conveyed and distributed house by house, small in-

dustry may be enabled to hold the field against large industry, and may possibly gain ground.

III. Whether Large Production should be extended to Agriculture.

Evolution towards large production is not equally manifested in all quarters. Though extremely marked in the carrying industry and in commerce, it is less prominent in manufacture; in France, especially, an important place is still held by small industry. In 1860 Paris was calculated to contain sixty-two thousand artisans working at home, either alone or with an apprentice. In 1872 the number had risen to a hundred thousand (see the discussion of this subject by the Société d'Économie Politique of Paris, in the *Journal des Économistes*, November, 1884.

In agriculture, indeed, the tendency to large production has scarcely become visible. Not in the slightest degree in France, or even in Europe, is small farming disappearing in favor of large farming. (According to the agricultural statistics of 1882 there were in France 5,672,007 plots under cultivation, giving an average of about twenty-two acres for each separate holding. In reality, for the largest number this average is far too high; there are more than two millions which are of less than two and a half acres.) What is the reason for this?

The collectivists, who on this point are in agreement with some of the leaders of the classical school, hold that this state of things is an anomaly, a mere pause in evolution, which is due to the habit of following routine which is characteristic of agriculture. They adduce the example of the people of the United States, who apply themselves to agriculture on the largest scale, and ask, "Is it not to this that they owe that superiority which enables them to crush European agriculturists in our own markets?" Some of those American farms have more than thirty-five thousand acres of tilled ground, where everything is done by steam, and in which a hundred ploughs are seen to start in the morning, and not reach, till evening, the end of their single furrow!

Does not, then, large production in agriculture present the same advantages as in manufacture ; viz., economy of general expenses? Certainly it does ; though here the savings are of smaller amount.

There is economy of situation and of buildings ; for on a large estate less ground will be lost in ditches, fences, and turnings of the plough, and less space wasted in cellars, barns, and stables than would be the case in a small holding.

There is also economy in labor ; for though division of labor is far more difficult to effect on a farm than in a workshop, still it can be applied in a certain measure, and the employment of animals and of machines permits of a large reduction of manual labor.

Above all, there is economy in capital. It is clear that a holding of a thousand acres will not require as many oxen, horses, ploughs, carts, and agricultural implements of all sorts, as ten farms of a hundred acres apiece.

Yet, in spite of all these advantages, large farming possesses a vice which in some degree sets them off. In proportion to the surface cultivated, it obtains from the soil a far smaller quantity of wealth than does small farming. Its net produce may be larger, *i.e.* the proprietor may gain more profits, but the gross produce is far inferior. Now, taking into consideration the increasing density of population in all civilized societies, the future belongs to that mode of farming which can extract from the soil the largest quantity of nutritious material.

In his now old but not old-fashioned *Traité des systèmes de culture*, M. Hippolyte Passy recognizes the superiority of small farming, both as regards the gross and the net produce. What generally makes people inclined to believe in the superiority of large farming is the intellectual superiority which our large farmers possess over small peasants ; we see that large holdings are better kept, and always lead the way in agricultural improvements, and we are thus induced to attribute to the difference in the mode of cultivation what really arises from the difference between the men themselves.

On this point the example of the United States proves nothing ;

for, though those enormous farms in the New World have their advantage of producing corn at very little cost, on the other hand, the quantity they grow is very small. The yield does not exceed twelve to thirteen bushels per acre, which is inferior to that of the most ordinary land in France. In France, indeed, the average yield per acre is seventeen bushels; in Holland, Belgium, and England it varies from twenty-six to thirty-three. This extensive cultivation may be permissible in the United States, where there is still plenty of land and the population is relatively scarce, but when men attain such proportionate numbers there as they do here, the methods of large farming will have to be abandoned, and labor and capital will be concentrated on smaller and smaller areas in order to increase the yield. Even now, from one census to another, we see that this reduction is being effected in the size of agricultural holdings. When the United States are as thickly peopled as China, if they are destined ever to become so, and two or three acres of land will have to do for the support of each family, agriculture, as is now the case in China, will take the shape of kitchen-gardening; *i.e.* all its power will be concentrated on holdings which will be no larger than small gardens.

We believe, then, that the agriculture of the future will be small, far rather than large, farming; and here we find the verification and the explanation of the law we mentioned above when speaking of the "ground." We refer to the progressive reduction of the cultivated area in proportion as a people passes through the successive phases of hunting, pastoral, and agricultural life; and during the agricultural period as the race passes from extensive to intensive cultivation, and thence to kitchen-gardening, such as is practised to-day in places where population is thickest; *i.e.* in the precincts of large towns. Round Paris kitchen-gardening may give as much as £400 worth of gross produce per acre; *i.e.* as much as will support about twenty people; but naturally the extent of the holding is in inverse proportion to the importance of the yield: a man must start rich to be able to cultivate one acre on these conditions.

General Tcheng-ki-Tong, in the *Revue de la Réforme sociale*, October 15th, 1886, says that "in China landed estates are not extensive; those of four or five acres are considerable, for two or three acres will provide for a family of twenty people."

Besides, small holdings are by no means incompatible with association or even with the methods of large farming, if by that term we are to understand the concentration of the largest possible amount of capital and of labor on a given point. We must imagine that in the future these small proprietors will join together to introduce on their land all the improvements of agriculture, to buy or hire in common machines and stud animals, to have their produce carried in common by portable railways like the Decauville Railway, to buy wholesale manures, seeds, and plants, and also to sell their goods collectively. Such, even now, are the methods employed by "agricultural syndicates," which are greatly developing in France. Yet we must admit that association between landowners presents almost insurmountable difficulties when it is no longer restricted to the transaction of a little business together, but is extended to cultivating their lands in common. For such an association to succeed, the estates over which it is to act should be contiguous; but for landowners to be near neighbors leads to the law courts rather than to genuine pursuit of the methods of association.

The question of *large and small farming* is not necessarily bound up with that of *large and small property;* for a large estate may be broken up into an indefinite number of small farms, as is the case in Ireland; and, inversely, small proprietors might unite their land for the purpose of working it in common, as is done in some parts of Russia. Still, the two questions are connected, and usually speaking, small farming goes hand in hand with small property. When we deal with the distribution of wealth, we shall see that small property is tending to replace large property, and it will not be difficult to justify this evolution from the standpoint of social justice. Thus the two evolutions are advancing on parallel lines and seem to strengthen one another.

CHAPTER II.

DIVISION OF LABOR.

I. The Different Forms of Division of Labor.

Association, of itself, means nothing more than the joining together of individual strength, which is sometimes called "simple co-operation." Division of labor implies a certain distribution of labor among the associated persons so that each man executes but one operation; this is termed "complex co-operation."

If the work to be done is perfectly simple (such as digging up the earth, raising a weight, rowing, chopping wood), such labor does not lend itself to any sort of division; each man will execute the same movements. But as soon as the acts involved in the work become complex and comprise various movements, it is altogether advantageous to break up that labor (which, considered as a whole, appeared as a single task) into as large a series of divided tasks as is convenient, and to assign one task to each man.

The first form of division of labor is the separation of employments, *i.e. trades*. When society is in the embryo, either as tribe or even as a patriarchal society, each man takes any work just as he pleases. But as soon as society becomes organized, there is a tendency for each man to devote himself to a fixed occupation, and the division of trades begins. Some prepare food, some clothing, others watch over the safety of all. Then in proportion to the improvement in organization, the specialization of functions grows out into numberless branches. For instance, the industries of supplying food and clothing have each of them given birth to a hundred different trades, and these, in their turn, may be subdivided into distinct operations, each of which requires special workmen. The remark-

able articles by Professor Schmöller on "La Division du travail étudiée au point de vue historique," which appeared in the *Revue d'Économie politique* for 1889 and 1890,[1] give excellent accounts of the historical development of division of labor in the family, in industry, in agriculture, and in commerce.

The second form of division of labor is that shown in the *workshop*. This first drew Adam Smith's attention to this wonderful phenomenon and caused him to write those classical pages on the matter which have been quoted over and over again. (See the *Wealth of Nations*, Vol. I, Bk. i, Chap. 1.) The example he chose is a little out of date, for nowadays most pins are made by machinery.[2] As we have already seen, all industrial labor is a simple series of movements, and this complex movement is split up into a series of as simple movements as possible, and each of these is confided to different sets of workmen; thus each man (as far as is practicable) will execute but one movement, which will always be the same.

A very vicious error in calculation would be made by thinking that division of labor can be effected by the employment of one single workman for each separate act; far more are generally needed. Say that the making of a needle comprises three different acts, — the making of the point, the head, and the eye. Let the point take ten seconds, the head twenty, and the piercing of the eye thirty. It is clear that to keep pace with the solitary maker of points, we require two workmen for the heads, and three for the eyes. Thus six, not three, workmen are needed, unless, indeed, the point-maker is to sit part of the day with his arms folded. This hypothesis could be easily complicated.

[1] Translated from the original German papers which appeared in Schmöller's *Jahrbuch für Gesetzgebung*, Vol. XIII, Part III (1889), and Vol. XIV, Part I (1890). — J. B.

[2] Before the introduction of the Wright pin-machine in 1824, the labor of fourteen persons was needed to make a pin. Nowadays, a needle requires immensely more labor in the proportion of about seventy to needles and three to pins. (Bevan's *Industrial Classes*, 1876.) — J. B.

In the next chapter we shall see that there is a third form of division of labor that we might term *international*, which has only been recently developed under the improvements of communications, and the growth of international trade, each people devoting themselves in particular to the production of articles which appear to be the best fitted to their soil, their climate, or the characteristic qualities of their race.

The preliminary condition for the birth and growth of division of labor, under either of the above three forms, is *production on a large scale.*

In fact, the greater number of divided tasks into which the labor can be split, the more perfect is the division of the labor, but the number of workmen will necessarily have to bear some relation to the number of these distinct acts. Now it is clear that the number of men a manufacturer can employ depends on the extent of his production; but as we know that extent of production itself depends on the extent of the market, we may sum up thus: division of labor is in direct ratio to the extent of the market.

It is this question as to the extent of the market, as has been frequently observed, which causes division of labor to exist only in large centres, and renders it unknown in country or village life. In a little place we find higgledy-piggledy in one shop, — groceries, pork-butcher's goods, children's toys, stationery, mercer's goods, ribbons, gloves, etc., which in a large town would give rise to as many different trades. The reason is plain. The villager is obliged to turn his hand to everything and be a jack-of-all-trades for the simple reason that no *one* trade would enable him to earn a living.

A superficial look might make us think that the huge bazaars of great capitals, *e.g.* the Louvre or the Bon Marché, were in the same case; for they sell all kinds of articles. In reality they exemplify the highest degree of division of labor; for each sales-room has a separate trade with special assistants and heads, one dealing with lace, another with oriental carpets, etc.

Most books on political economy mention a second condition necessary for division of labor; namely, a *production* which is *continuous* and not intermittent; hence the conclusion is drawn that division of labor is not applicable to agriculture.

No doubt division of labor on a farm cannot be managed in the same manner as in a workshop. It is impossible to put one man to sow, another to reap, a third to gather in the grapes, or graft or train or plant the vine, because each of these operations — sowing, vintage or corn-harvest, grafting, pruning, planting — can only be effected at a fixed season, and for a limited number of days. If we devoted a man to each of these special kinds of work, he would have to be idle for eleven months out of the twelve. But it is possible, or at any rate would be desirable, to arrive at division of labor under another form, in which each man, or group of men, would apply themselves to the cultivation of a specific plant. No doubt this will be brought about in proportion as agriculture becomes more intensive and more akin to gardening.

It was for this reason that Fourier put division of labor under agricultural association, and pushed the method to the farthest extent, organizing as many groups of laborers as there are species (men to grow the cabbage, the turnip, the pear, the cherry, etc.), and even sub-groups for the varieties of each species.

II. The Advantages and the Disadvantages of Division of Labor.

Division of labor increases the productive power of labor in proportions that surpass all imagination. The following are the reasons for these: —

Firstly. As we have previously explained, the most complicated labor is broken up into a series of very simple and almost mechanical movements, which are very easy to execute and thus wonderfully facilitate production.

Indeed, such simple movements may be reached as to show us that man's intervention is no longer necessary to execute them,

and that a machine will do as well. It is by this process of analysis that we come to perform mechanically labors which at first sight appeared to be most complicated.

Secondly. As the tasks which are thus created are of various kinds, all of them differing in difficulty and in the strength and attention they require, we are enabled to fit each of them to the individual capacities of the workmen. Thus each man's natural aptitudes can be utilized, and we can escape that waste of time, of strength, and even of capital, which would result from setting at the same work all alike, weak or strong, ignorant or intelligent, — a squandering of the energy of the strongest or the most able on work which is too easy for them, or a waste of the labor of the weakest or the most ignorant on a task which is beyond their powers.

Thirdly. The constant repetition of the same exercise gives men a really wonderful dexterity, just as in intellectual labors sustained and persevering application singularly develops the intellectual faculties, and thence productive power. Doctors, lawyers, painters, students, scientists, all have their specialties nowadays; and each man finds it to his advantage to quarter himself in one little corner of human knowledge and diligently explore its resources. In the case of mental labor this tendency is not without serious disadvantages; but in productive labor (properly so-called) this improvement in work, which is acquired by long custom, constitutes the principal advantage of division of labor.

Three other less important reasons are usually assigned for the increase in productive power afforded by division of labor.

Fourthly. The economy in time which results from the continuousness of the labor. A man who often changes his work will, at each change, lose not only the interval of time which must necessarily pass between two different acts, but, above all, the time required for *setting to work.*

Fifthly. Economy in tools, which reaches the maximum when each laborer employs but one implement, and uses that constantly.

Sixthly. The diminution in the period of apprenticeship, which is naturally longer in proportion to the complex nature of the trade.

But against all these advantages, some serious drawbacks have long been observed : — [1]

Firstly. The degradation of the worker, who, by the repetition of one single movement, which is as simplified as possible, is reduced to play a purely mechanical part. On this topic, we may refer to Lemontey's classic pages and famous saying, "It is a sad confession for a man to make that during his whole life he has constructed nothing more than the eighteenth part of a pin!"

The rejoinder is, that the use of machinery constantly tends to correct this evil effect of division of labor. Indeed, we may rest assured that as soon as any act has been so simplified as to become mechanical, it will not be long before the workman is replaced by a machine; for in such a case, that is always found to be profitable.

Another indispensable corrective of division of labor in modern industry is a limitation in the length of the day's work, which enables the workman to occupy his body and mind in a more normal manner.

Fourier, the socialist, believed that, by the aid of what he calls *short sittings*, all the advantages of division of labor might be obtained, together with an avoidance of its disadvantages. According to him, each laborer is to ply not one only but several trades, and to pass in turn from one to another. The advantages of specialization still remain; for a man need not work at one thing his whole life so as to be able to do it well. He may become very skilful in five or six different operations, especially if they are simple ones, thanks to division of labor. On the other hand, the deadening monotony, caused by the same work always, is thus avoided. In this manner satisfaction is given to what Fourier very picturesquely calls the "butterfly" passion. This idea of Fourier's is by no means absurd, though it has been much ridiculed; still, for its successful execution, the workman would need to be able to change his labor without losing too much time.

[1] Some of them by Adam Smith himself. (See *Wealth of Nations*, Bk. V Chap. I, Article II. — J. B.

Nothing but the phalanstery where all workers are assembled, and all kinds of work are done in the same place, would allow of this sort of rotation of labor, in which the blacksmith could leave his anvil to go and tend his roses.

Secondly. The extreme dependence of the workman who is incapable of doing anything except the fixed and altogether special operation he has become accustomed to, and who consequently is helpless when out of work or turned off. Like the very parts he makes, which are worthless without the combination of them which turns them into a whole, he, too, may be said to be nothing more than a wheel in that great machine we call a manufacture; beyond that, he is good for nothing.

There is certainly some truth in this criticism. No doubt, given the present organization of industry with extreme specialization in purely mechanical acts, and some disadvantages may result from it, especially when we consider stoppage of work; but in a general way, it is not right to complain that each man is tending to become more and more dependent upon his fellows. The consequence of this reciprocal dependence, of this closer and closer union, which binds individuals together into a sort of sheaf, is not to diminish, but far rather to strengthen, individuality. As is well remarked by M. Espinas, in his *Sociétés animales*, "The aptitude for isolation is but a very inferior characteristic of individuality. It is not a retrogression but a progression for the individual to become an organ relating to a more extensive whole, and to hold numerous relations with other foci of life and other individualities."

Moreover, this is the result of a natural and absolutely general law. The more perfect an organization is, the more closely dependent is the individual on the other individuals with whom he is associated. In weakly constituted societies, in virtue of their imperfect organization, each individual keeps his own particular worth, and may be separated from the society to which he belongs without great harm, either to himself or to it; just as sponges, polyps, and even earthworms, may be divided into segments without much disadvantage, the severed piece being self-

sufficient. But, in an organized society where division of labor is firmly established, man becomes so dependent upon his fellows that if he is separated from them, it is impossible for him to live; just as in highly organized beings a member detached from the body dies at once, and in some cases, draws along with it the death of the body to which it belongs. It is the old fable of Menenius Agrippa, — the fable of the belly and the members, — though, indeed, he knew nothing of sociology or biology. "Let a division be made between the coal-mining populations and adjacent populations which smelt metals or make broadcloth by machinery, and both, forthwith dying socially by arrest of their actions, would begin to die individually." — HERBERT SPENCER, *Principles of Sociology* (3d ed.), Vol. I, page 506.

Every time, then, that people complain of division of labor, — that it kills individuality by reducing the laborer to the position of a mere accessory, and placing him in a state of absolute dependence, — we must answer that it is only a small evil in exchange for a great good, the wider and wider development of *social solidarity*.

As Professor Schmöller says, in the articles referred to above, in the *Revue d'Économie politique* for 1890: "Those who give vent to the above criticisms are mistaken, both historically and practically, if they imagine that, before the inception of division of labor, man was nearer to the ideal of human individuality and was more harmoniously developed. Without division of labor he would be merely a barbarian, who eats, drinks, and lives in idleness. Through it alone has high culture been rendered possible, in intellectual matters, in morals, in æsthetics, and in economics. First of all, this fell only to the lot of a few, but it is gradually extending to a larger number of individuals. We shall not make man perfect by endeavoring to harmoniously develop all his powers; that would be to ask for what is impossible. Man's weakness and the short duration of his life prevent him achieving anything more or anything nobler than this: — he must devote himself to a special vocation, but at the same time must regard with an open mind all that is best and greatest in other spheres of activity."

III. Liberty of Labor.

By what mysterious law is this division of labor established in a human society? It is not enough to say that it arises spontaneously in consequence of a fate-determined evolution like that which forms and distributes the organs of the human body; for then we should have to inquire how men, who are free agents, are thus distributed between the various trades, so that each occupation has its due proportion of hands and no more.

Division of labor in the workshop presents no difficulty, for it is the manager or the master himself who assigns their respective tasks to his men; but when we come to division of labor in society, the separation of trades and professions, we ask, What is the power that there assigns his work to each person?

It is the law of value, or the law of supply and demand. If men flock too freely into any trade or profession, their labor or their services become depreciated in consequence of their superabundance, and they are not long in retiring from, or, at any rate, in dissuading their children from entering upon, a career which is no longer remunerative. If, on the other hand, any trade or profession is not completely filled, those who are engaged in it find their labor or services greatly enhanced in value in consequence of their scarcity; and this premium on wages or profits soon attracts many competitors into the calling.

It is the working of free competition, then, or, in other words, each man's liberty to choose the kind of labor he thinks most advantageous, which maintains in some sort of equilibrium the necessary proportions between the various professions and trades.

As is well known, *liberty of labor* ranks among the conquests of the Revolution of 1789, and has since then gradually spread over the whole Continent. Under the *ancien régime* labor was subject to a system of regulation which was both highly protective and extremely vexatious (the two things generally go hand in hand), and which was carried out by the statutes of the *corporations* themselves as much as by the petty interference of the govern-

ment. This system, which was first suppressed by Turgot, was definitely abolished by the celebrated law of March 17, 1791.

Yet it cannot be asserted that the distribution of labor in our modern societies, such as it results from liberty of labor, is anything to boast of, and we are unable to share the complacent admiration expressed on this subject by too many economists. Indeed, when we look at the matter, free from all preconceived ideas, we are astounded at the really extraordinary development of parasitic or even harmful industries, such as the liquor-sellers, who are almost as numerous as the effective staff of the French army. The number of licensed liquor-sellers in France is 422,303. This, of course, includes hotel and restaurant proprietors ; but the public-houses proper are, none the less, terribly numerous in large towns. In the Department of the *Nord*, one drink-shop is reckoned for forty-six people ; and, as out of these forty-six inhabitants three-quarters are women and children, that leaves one public-house for every twelve men !

Even when we come to useful industries, we find that some are much undermanned, — for example, country doctors, — whilst others are enormously over-crowded, such as the grocers and bakers who swarm in our towns to their own ruin and to that of the consumer as well. Here are the figures of some of these inequalities. In all France there are 14,668 doctors or health-officers. This number (1 to every 2000 persons) would be enough if they were well distributed ; but they are almost all in the towns, leaving only 3000 or 4000 for a rural population of 20,000,000 ; *i.e.* 1 for 6000 or 7000 persons, and very scattered, too. Of grocers, on the other hand, there are 106,101, or 1 for 90 families. There are 52,957 bakers, and almost as many butchers ; or 1 for 180 families. Of course, in the towns the proportion is far higher.

In fact, the personal motives which incite workers to enter on such and such a calling are far from being synonymous with the interests of society. The remuneration allowed by the law of supply and demand to any labor or service is certainly in propor-

tion to the utility of that labor or service; but we know that this utility has no rational or moral value, and does nothing more than respond to men's desires or men's frailties.

In spite of the shortcomings of liberty of labor and competition as regulators of social production, we cannot easily think of anything which could take their place, except compulsion, which would be worse. The collectivist and communist systems, it is true, imagine that they can be advantageously replaced by commissioning the social power with the duty of apportioning the number of laborers required for each office, a task which would be facilitated by the use of greatly improved statistics. Thus division of labor in society would be established in the same way as it is in the workshop, *i.e.* by regulation. It is not altogether obvious in what manner the mechanism of production could gain by this, whilst it is perfectly clear how much each one of us would lose in respect of liberty. Still, in the *Revue socialiste* of April, 1888, an attempt was made by M. Tufferd, in an article on "La Répartition du travail dans la société future," to effect this distribution of labor without wounding individual liberty. But the author has to have recourse to the law of supply and demand, which, indeed, is unavoidable.[1]

[1] A thorough discussion of the subject will be found in Professor Marshall's *Principles of Economics* (1890), Bk. VII, Chaps. IV and V. — J. B.

CHAPTER III.

EXCHANGE.

I. On the Part played in Production by Exchange.

Exchange fills a huge place in social life.

Sufficient proof of that rests in the fact that nearly the whole of the wealth which is produced is only produced for the purpose of being exchanged. Take the corn in the granaries, the wine in the cellars of land proprietors, the clothing in the tailoring-rooms, the shoes at the bootmaker's, the jewels at the goldsmith's, the bread at the baker's — and ask, What part of all this wealth is destined by the producer for his own consumption? Very little or none at all. It is only *merchandise*, or, as the name tells, objects intended for sale. Our industry, our skill, our talents, are also more often than not applied to satisfy the wants of others, and not our own needs. How often does it happen that the barrister, the doctor, and the solicitor have to work on their own account, plead their own cases, attend to their own ailments, draw up their own deeds? They, too, regard these services only from the point of view of exchange. This is so true that when we come to estimate our wealth, we weigh it not according to the greater or less amount of satisfaction it has afforded us, but purely according to its value; in other words, according to its power of exchange.

A family of peasants living on their own land and burdened with few wants might at a pinch be able to consume nothing but what they produce, and only produce what they will be obliged to consume; but for this to be effectual the family would have to live almost in the savage state, and I do not believe that any civilized society could offer a solitary instance of such an occurrence.

This state of affairs, in which exchange reigns supreme, is due

to division of labor as described in the last chapter. For how could a man settle down in one occupation, *e.g.* devote his life to the manufacture of nails or the making of cheese, unless he could reckon on others making bread for themselves and for him, and on his thus being able to obtain by exchange everything he does not produce himself?

We must admit, however, that some socialist schools propose a reconstruction of society in which exchange will be suppressed without any modification in division of labor. They propose to solve the problem by a resort to communism. In the bosom of a family, or even in the heart of a tribe, there is some division of labor, although of a rudimentary kind; but there is no exchange between the members of that family. Each member pours into the common fund the product of his own labor, and takes from that fund products which he makes use of for his own personal consumption. Is it not possible to conceive the extension of this system to an entire country? No; for real community can only exist between people living together, say in the same commune or parish; now, as it would be absurd to think that each parish in a civilized country can produce all it consumes, and only consumes what it produces, exchange relations would be necessitated between the different parishes. And if, as an absurd hypothesis, real communism were extended over the length and breadth of a country, exchange between different countries would come into play. All, then, that communism can do is to replace exchange between individuals by exchange between collective bodies.

Whether exchange should be considered to be productive of wealth is an old question of debate among economists. The Physiocrats used to answer it in the negative. When we look at the fact of exchange separately, and reduced to its legal basis, as a simple transfer of property, as a *quid pro quo:* we certainly cannot term it an act of production; for it follows from its very definition that its function is not to produce new wealth, but to transfer already existing wealth. Clearly, the sale of a piece of land cannot be called an act of production. Moreover, as sale and pur-

chase are the two faces of exchange, if to sell is to produce, so likewise is to buy; and we should all of us be producing every time we make a purchase. That would be a confusion of language.

But we must not look at exchange in this light. We must regard it as the last in that series of acts of production which begins with invention, also a non-material act, and continues through the whole series of agricultural, manufacturing, and transporting industries, forwarding products, stage by stage, towards their final destination, the hands of the person who is to use them.[1] Change of form, of place, and of ownership are all three equally indispensable for the final result; and surely the last named is not the least important.

Yet the Physiocrats attempted to show that exchange was profitable to no one. For, said they, all exchange, if it is equitable, presupposes the *equivalence of the two values exchanged*, and consequently implies that there is neither gain nor loss on either side. It is true that one party may be cheated; but in that case, one man's profit is easily balanced by the other's loss, so that altogether the final result is nought (see Quesnay, *Dialogues sur le Commerce*, and Le Trôsne, *De l'Intérêt social*). This is nothing but sophistry, and was refuted by Condillac long ago. We need only remark that, if no exchange ever led to profit, or if every exchange necessarily implies fraud, it would be difficult to understand why men have persisted in practising exchange for so many centuries. As a matter of fact, the values exchanged are not equivalent. What I yield in the process of exchange is always worth less *to me* than what I acquire; for clearly without that motive I should not surrender it at all, and my fellow-exchanger goes through the same train of reasoning for his part. Each of us considers that he receives from the exchange *more than he gives*, and we are both of us correct. There is no contradiction between these opposite judgments and conflicting preferences, for we know that the utility

[1] Consumption is the *raison d'être* of all goods, and not merely of the food, of which Hegel said once at a dinner: "Bring it, *that we may fulfil its destiny*" (*Life*, p. 217). — J. B.

of each thing is purely subjective, and varies according to the wants and desires of each individual.

II. The Advantages of Exchange.

The advantages of exchange may be grouped under the two following heads: —

Firstly. Exchange enables us to utilize for the best a large quantity of wealth which without it would have remained unused. Without exchange what would England do with her coal, California with her gold, Peru with her guano, Brazil with her "bark"? When analyzing the nature of wealth, we found that an indispensable condition for any object ranking as wealth was its capability of being utilized. For this to be effected, exchange must convey the article to the person who is to use it, — the quinine to the fever patient, guano to the farmer, coal to the manufacturer, etc. Suppose that to-morrow a decree be issued, suppressing exchange everywhere, in consequence of which every man and every nation will be obliged to keep on their own land or territory and for their own use all the wealth they possess. Just imagine what an enormous mass of wealth would at that single stroke be condemned to uselessness, and be good only for rotting where it stood! Not only must we say that without exchange the greater part of wealth would be unused, but, we must add, it would never have been produced at all.

Secondly. Exchange in particular enables us to utilize for the best a host of productive capacities which without it would have lain idle. Observe, in fact, that were there no exchange, each man would have to apply himself to the production of all that is necessary to supply his wants; and supposing they were ten in number, he would have to ply ten different trades: whether he did them well or ill would be of no consequence. He would be obliged to regulate his production *not according to his aptitudes, but according to his wants*. The introduction of exchange completely changed all this. Henceforward, as each man was sure of

obtaining by exchange all that he required, he could devote himself to the occupation he could do the best, and could regulate his production *not according to his wants, but according to his aptitudes* or his means. Before the establishment of exchange, each dweller in the world had to produce what he most needed. Since the institution of exchange, he has only had to produce what he can do the most easily. Of a truth, a great and wonderful simplification!

It may be said that this advantage greatly resembles those afforded by division of labor; in fact, it is the same advantage, but hugely increased and multiplied. It would be more correct to say that it is to exchange we owe division of labor with all its tributary advantages; through exchange division of labor is enabled to overstep the narrow circle of the workshop, or the family community, and to spread out over the whole surface of a large country, and even to the ends of the earth. Were there no exchange, association and division of labor would demand a prearranged concert between the fellow-workers; a mutual understanding would be necessary for their union in a common work. But exchange dispenses with the necessity for this prior agreement; each man, henceforth, from far or near, can produce according to his natural or acquired aptitudes, and according to the natural products of the land he lives in; he can devote himself entirely to one kind of labor, and can always keep throwing the same product upon the market, resting sure that by the aid of the ingenious mechanism presently to be investigated, he will be able to receive in the exchange the objects he may desire. It has often been remarked that the daily consumption of each one of us is the combined result of the toil of hundreds, or perhaps thousands, of laborers, who are united by the bonds of an association which, though perhaps unperceived, none the less exists. Adam Smith gave excellent instances of this (*Wealth of Nations*), which have been reproduced in various forms. For example, M. de Laveleye, in his *Éléments d'économie politique*, says: "The poorest workman consumes the products of the two worlds. The wool for

his clothes comes from Australia, the rice in his soup from India, the corn in his bread from Illinois, the petroleum for his lamp from Pennsylvania, his coffee from Java."

Thus it is that in any country, and even in the whole world, the best possible use is made of all the labor, all the capital, all the natural agents that are available, that the right man is put in the right place, and that each man and each people exercise to the full both their skill and their productive power.

III. On the Means of facilitating Exchange.

Exchange would be very difficult, nay, almost impossible, had not ingenious means been contrived for simplifying and facilitating it. They may be classified as follows: —

Firstly, the institution of a class of *middlemen*, called *traders* or *business men*, and various other methods for putting into communication producers and consumers.

Secondly, the creation and improvement of *means of transport* for the easier removal of commodities from place to place.

Thirdly, the invention of a commodity meant to act as a common third under the name of *money*, to break up barter into sale and purchase. We will investigate these in turn.

IV. On the Part played in Production by Traders.

It would be a mistake to think that trade began between neighbors, and thence gradually spread farther afield. The members of one and the same tribe are too much akin in their habits and their wants, and division of labor is too fully developed, for any regular movement of trade to arise. Thus trade was first set on foot between distant peoples inhabiting countries of diverse natures; in a word, there was international trade before there was home trade. Hence the earliest *traders* were *travellers* or adventurers, such as we read of in Marco Polo's travels, and in the equally characteristic though imaginary journeys of Sinbad the Sailor, in the *Thousand and One Nights*.

Now as trade was only carried on between strangers, or, as for the ancients the terms were synonymous, between enemies, its first beginnings were attended by fraud, stratagem, and frequently by violence; and the public conscience was not disquieted by the circumstance that Mercury was, at one and the same time, the god of traders and of thieves.

It therefore follows that from the first, traders were persons of note, who were envied and feared — and, ranking far above the artisan and agricultural classes, were, in fact, a true aristocracy. It was only at a comparatively recent date that small retail trade began to make its appearance. This evolution of the trader class may be studied in Professor Schmöller's article, which we have quoted above.

Two phases may be noted in the history of traders.

Firstly. First of all there is the *travelling* trader. He still exists in all countries where trade is not yet highly developed; trade is there carried on by means of caravans. Survivals of this are the *pedlar* to be seen in our villages, and the hawkers with their cries, who make the streets of Paris resound with their varied melodies.

But this system of the trader travelling with his goods is very imperfect, for it can scarcely be applied except to articles of luxury or of easy transport, and is exceedingly burdensome, for each commodity is charged with enormous general expenses. The profits of the traders who take caravans through Central Africa must be at least 400 per cent to yield any remuneration at all.

Secondly. Thus whenever commerce has attained any robustness of development, the travelling trader soon gives place to the sedentary trader, that is to say, the *shopkeeper*. Before, it was the trader who went forth to seek for his customer; henceforward, the customer has to come and find the trader. It is necessary then for the trader to attract the attention of the passer-by either by *sign-boards*, which still survive in the barber's pole, which is suspended from hair-dressers' doors, or the Highlander or the Turk's head before tobacconists', or by the display of the goods

themselves in dazzling shop-fronts; again he may have to attract his customer from afar, either by *advertisements, puffs, and catalogues*, or by commercial travellers, more elegantly called nowadays "representatives of commerce," who resemble the travelling traders of the past, but differ from them in only carrying samples of their goods.

The following are the advantages that society derives from the existence of traders: —

Firstly. They serve as middlemen between the producer and the consumer, and save each of them the time he would have to waste in seeking for the other.

Secondly. They take goods wholesale from the producer, and by selling them retail obviate the embarrassments which would inevitably arise from an absence of coincidence between the quantity offered by the producer and that demanded by the consumer.

Thirdly. They keep the articles in stock, and thus prevent the difficulties which might result from the absence of another coincidence, — namely, between the time at which the producer wishes to dispose of his product and the time when the consumer is desirous of acquiring it. These, no doubt, are weighty services, but, as we shall see, rather too high a price is paid for them.

V. The Disadvantages of the Multiplication of Traders.

In consequence of various causes, among the chief of which must be placed the easy labor involved in the profession of trader, and the attraction it has for many people, especially in France, the number of these middlemen, and of retail tradesmen in particular, has become altogether disproportionate to men's wants. This is seen in the figures given a few pages back (page 167). About one-tenth of the population of France is employed in trade in various ways: such a proportion is altogether excessive. It is a terrible waste to maintain one middleman for every ten persons. This multiplication of middlemen, by reducing each man's sale, has burdened each article with relatively enormous general ex-

penses, and has kept prices up at an altogether factitious height. Vainly do improvements in machinery, or the development of international trade, lower little by little the cost price of a host of products; the consumer pays not a stiver the less for them. The retail prices remain almost the same, when they do not rise, and the public does not benefit by the progress in industry. The difference goes into the hands of the middlemen, though they for the most part do not gain much thereby, for the profits are consumed by the general expenses. This is a striking example of those cases previously referred to, in which competition causes dearness instead of cheapness. It is in this direction that we must seek for the explanation of that constant increase in the cost of living which is so justly complained of by the public.

The prices of corn and of meat in France have been continually falling for several years past; of this the competition of countries beyond the sea is the cause, and the lamentations of landowners are the proof. But the price of bread at the baker's and of meat at the butcher's has only fallen in an exceedingly small degree, or has not fallen at all, in consequence of this multiplication of middlemen. Thirty years ago, Paris, it was reckoned, had one baker for every eighteen hundred inhabitants; now it has one for every thirteen hundred: in other words, each baker sells a third less bread, and, to compensate for this, has to make more profit on each loaf. This is why he sells at eight pence a quartern loaf which is worth scarcely more than five pence a quartern.

It is not uncommon for a tradesman to levy on a piece of cloth sold by him a profit higher than the wages obtained by the workman who made it; in other words, the labor of cutting off a piece of cloth and handing it over to a customer is better paid than the labor required for making it entirely from hem to hem.

We should be astonished if we reckoned up the total tribute levied upon the public by middlemen. According to an inquiry instituted by the Orleans Railway Company in 1866 on the goods they supplied to their *employés*, the difference between the cost and the selling prices varied between 30 and 127 per cent. If we

take this minimum figure of 30 per cent, which is certainly less than the reality, and apply it to the total consumption of France, which is under £1,000,000,000 sterling, we see that the toll levied by the middlemen would amount to £300,000,000, or more than double what we pay in the shape of taxation. Socialists and economists alike are unanimous in denouncing this vice of our social organization. (See Fourier and Paul Leroy-Beaulieu, *passim.*)

If we add to this serious disadvantage the adulteration of goods which is becoming an actual peril to the public health, and is equally an effect of the bitter competition of traders, we are led to ask ourselves whether the services rendered by these middlemen are not now too dearly paid for, and whether we cannot find some other mode of organizing exchange which would be less burdensome for society.

The true remedy would clearly be to put producer and consumer in direct intercommunication by suppressing the middlemen, or at any rate by reducing their numbers to the minimum.

Long ago, certainly before ever the class of traders was formed, producers and consumers had found the means of meeting together at the *markets* and *fairs* which were formerly of such moment, and are still not without some importance in the heart of rural districts. But we can never dream of returning to such a machinery of exchange; for it would be more onerous than the employment of traders, on account of the loss of time and heavy cost of carriage; and its use is justly becoming more and more discontinued. The famous fair of Beaucaire is now nothing more than a huge local market; but fairs still hold an important place in those countries in which improvements in exchange have not yet been introduced. In the far east of Europe the fair of Nijni-Novgorod does business to the figure of £8,000,000 sterling,[1] and brings together 200,000 persons from the ends of the Old Continent.

[1] The amount is sometimes said to have diminished since 1851. But Professor Zehden, in his *Handelsgeographie* (5th ed., 1886), makes the figure £23,000,000 and the persons 300,000. — J. B.

The greatest difficulty to be met with in placing producer and consumer in direct communication is that the producer can scarcely sell retail, whilst the consumer can still less buy wholesale. But this difficulty can now be successfully overcome by association under a double form; either the association of producers who unite together to sell to the public directly, *e.g.* "agricultural syndicates" (see above, page 157); or the association of consumers who unite to purchase directly from the producers; that is the part of *co-operative societies of consumption* (see below, "Institutions for the facilitation of Saving"). Both kinds of societies, which, moreover, could mutually aid one another, are called upon to render the public a notable service by completely reforming our commercial organization.

In fine, there is reason to think that the mechanism of trade, after having rendered great services to society, has now passed its limit in most civilized countries. To use a current expression, it must be regarded as an historical category which has had its day, and which it is the duty of economic evolution to successfully eliminate.

VI. Means of Transport.

It is easy to conceive of exchange without any change of place of matter; for example, when it is applied to immovable things; or, better still, when it is busied with pure speculation on commodities. Nevertheless, change of place may be regarded as an essential feature of that particular form of exchange to which both practice and legal phraseology confine the name of "trade." Now the act of effecting a change of place, *i.e.* transport, requires much labor, and consequently great expense. Every invention, whose result is to facilitate the means of transport, at one and the same time aids exchange; hence the history of trade is in a measure identical with the development of communication by sea and by land.

The difficulties of transport are of various natures, and may arise from several conditions: —

Firstly, from *distance*. Man's genius cannot conquer distance. He can in no wise do away with or reduce the space between two points of the earth; but for us the obstacle of distance is practically converted into a question of time. Now, human invention has been singularly successful in reducing the time necessary for traversing a given distance. If the time required for travelling any given distance in France is twenty times shorter to-day than it was in the thirteenth century, we are perfectly justified in saying that the result obtained is just as if France to-day were four hundred times smaller than it was then (for surfaces vary in proportion to the squares of the radii). Now, thanks to railways, this hypothesis has become a reality; we can therefore say that the result of progress in effecting rapidity of communication is to indefinitely reduce the surface of the terrestrial globe.

Secondly, from *the nature of the commodity*. An ox is not so readily transported as vegetables; nor vegetables, as coal; nor coal as easily as gold. The various obstacles are weight, fragility, difficulty of preservation; but these may be greatly remedied by that rapidity of conveyance we have just spoken of. In the days of sailing-vessels, cattle could not have arrived, whether dead or alive, safe in harbors from America or Australia; such a thing can be effected nowadays, thanks to the short duration of the voyage. Formerly, fish, game, fresh-gathered fruit and vegetables could not be sent from the outlying provinces to Paris; now, they are sent daily, the journey taking less than twenty-four hours. Putting aside the quickness of conveyance, several inventions have helped to overcome this obstacle; such as the refrigeration process, which allows of the transmission of fresh meat from Australia; or the chemical process used for the preservation of articles of food (*e.g.* smoked meat, Liebig's process). In spite of all these things, the difficulty of transporting certain objects, particularly meat, has even now economic consequences of considerable importance and great inconvenience.

Thirdly, from *the condition of the ways of communication*. This is the most serious obstacle of all; but over it human industry has achieved its greatest success.

By sea the road is already made, or rather, there is no need of a road; the liquid element indiscriminately bears any weight, and its horizontal surface, which is everywhere alike, allows bodies to move freely in any direction. The weakest motive force — an unpaid-for force if the wind is used — is enough to set in motion enormous masses. It is not surprising, then, that the sea has always been the high road of commerce, and that countries separated by a thousand leagues of sea are really nearer than others divided by a hundred leagues of land. Even now, in spite of the progress of overland carriage, conveyance by sea is infinitely less burdensome; *i.e.* requires far less labor. At Marseilles, the English coal which has come through the Straits of Gibraltar, and has thus travelled nearly two thousand miles, is sold cheaper than the coal from the Grand-Combe mines (in France), which has only to come a distance of a hundred and ten miles. The cost of carriage of a ton by sea never exceeds one-fourth of a penny a mile, and is often much lower;[1] while, as we shall see, the railway tariff is not far off two pence.

On land the difficulty is greater. The broken surface of our planet scarcely permits of the transport of goods without the establishment of artificial roads.

The improvement of means of transport, whether by land or by sea, is shown in three different manners: *roads* (on land, macadamized causewayed roads, railways, bridges, and tunnels; by sea, the track of the great maritime routes according to the direction of winds and currents, canals such as those of Suez, Panama, and Corinth); *vehicular carriage* (on land, the wonderful invention of the wheel; by sea, the substitution of iron vessels for wooden ships); *the use of motive power* (steam-engines and locomotives). Transport by caravan, that is to say, on men's

[1] *e.g.* in January, 1885, wheat could be carried the whole way from San Francisco to England for 40*s.* per ton, or from Odessa for 15*s.* (First Report of Royal Commission on Trade Depression, 1886, page 169.) For railway charges, see a paper by Mr. J. S. Jeans in *Statistical Journal* (London), December, 1886. — J. B.

backs, as in Africa, or by beasts of burden, as in Central Asia, no doubt can dispense with roads, but vehicular carriage cannot. Now the making of a road is a costly matter, and is the more expensive the better it is; *i.e.* the more resisting its surface is and the nearer its direction approaches to the horizontal. The railroad is a perfect road, but it is also the dearest. In Europe it costs about £27,000 a mile, and nearly £7000 where it can be constructed at the least cost. There are now all over the world more than 350,000 miles of rail, which have cost at least £6,000,000,000. Thus an enormous amount of capital is sunk in them, which will evidently burden the transport of goods with the whole sum necessary for interest and redemption of the capital. In spite of this, if there is enough traffic, that is to say, if the goods carried by the railroad are of large enough quantity, much saving is effected in transport, without even reckoning the regularity, the convenience, and the quickness. The cost of carriage of a ton per mile is two pence or less, while by road it would be five pence; thus there is a saving of at least two-thirds. The average price asked by the [French] railway companies is less than two pence, but we must take into account the gratuitous works done by the State on behalf of the companies, which represent a considerable sum, and would, if they had to be paid back, greatly increase the cost of carriage. We need not be surprised at the less charge of railways when we reflect that to do the same amount of work as an engine attached to a goods-train, we should require, at least, on an ordinary road, three hundred horses, and that they would cover ten times less distance.

VII. The Breaking-up of Barter into Sale and Purchase.

For the working of exchange it is not sufficient to have that third person, interposed between producer and consumer, whom we call the trader; we require, also, a commodity to act as a common third interposed between the object given up and the object acquired; this we call *money*. When exchange is carried

on directly, commodity for commodity, it is termed "barter," but this is the most inconvenient and usually the most impracticable method. In fact, for the barter to be successfully effected, it is requisite that the possessor of some article should seek for some person who is disposed to acquire the commodity he possesses, and moreover (a coincidence the realization of which is even more difficult), who is willing to surrender the very article the former needs. Nor is this all: even allowing that this lucky meeting may occur, it is also necessary that the two objects to be exchanged should be virtually equal in value, — another and highly improbable coincidence.

Commander Cameron tells us what trouble he had in buying a boat when travelling in Africa in 1874. "Syde's agent wished to be paid in ivory, of which I had none; but I found that Mohammed Ibn Salib had ivory and wanted cloth. Still, as I had no cloth, this did not assist me greatly until I heard that Mohammed Ibn Gharib had cloth and wanted wire. This I fortunately possessed. So I gave Ibn Gharib the requisite amount in wire; upon which he handed over cloth to Ibn Salib, who in his turn gave Syde Ibn Halib's agent the wished-for ivory. Then he allowed me to have the boat." — VERNEY L. CAMERON, *All Across Africa*, Vol. I, pages 246, 247.

The finding of a commodity to serve as a common third remedies these inconveniences. It clearly presupposes the establishment of an express or tacit convention between men living in society; viz. each man agrees to receive, in exchange for his products, this third commodity. Once that has been arranged, and the transaction goes admirably. Let the third commodity chosen be the metal silver. In exchange for the commodity I have produced and wish to dispose of, I willingly accept a certain quantity of silver, even though I may have no use for it. Why? Because I know that when I wish to acquire the object I need, I shall only have to offer its possessor the same quantity of silver, and he will accept it for the same reason as made me take it myself.

After what has just been said, it is evident that every transaction of barter can be broken up into two processes. Instead of exchanging my commodity *A* for your commodity *B*, I exchange *A* for silver, to exchange that silver again for *B*. The first process is called "sale," the second "purchase" (at least when the common third is in the shape of actual money). We appear, then, to have a complication instead of a simplification. But a straight line is not always the shortest road, and this ingenious *détour* does away with an incalculable amount of trouble and labor.

As we have explained, barter was rendered impracticable by the following circumstances: it was necessary for a certain producer *C* to meet as a fellow-exchanger another person *D*, who would be inclined at one and the same time, *firstly*, to acquire the object *C* wished to dispose of; *secondly*, to surrender the very article *C* wished to acquire. Henceforth, thanks to money, the producer *C* will certainly have to find some one willing to take his article, but he will no longer have to ask from that trader *D* the article he himself needs. For that he will have to apply to another person, at another time and in another place. It was the indivisibility of these two processes that made them difficult; but the tie once broken which united them, and each of them individually becomes easy enough. It will not be very difficult to find some one who needs your commodity, *i.e.* a buyer; nor will it be difficult to find a person willing to surrender to you the article you require, *i.e.* a seller.

But we must not forget that, though these processes are henceforth separated, they nevertheless continue to form a whole, and that one cannot be conceived without the other. In our everyday life we are too much inclined to imagine that sale and purchase are each of them independent and self-sufficing processes. That is an illusion. Every purchase presupposes a prior sale; for before being able to exchange your money for goods, you must have previously exchanged your goods for money. Inversely, every sale points to a future purchase; for if you exchange your goods for money, that is only to exchange that money at a later time for

other goods; for what else could be done with it? Still, as money can be kept for an indefinite period without being used, a very long interval may elapse, — say several years or even several generations, between the two acts of the play, — between the sale and the complementary purchase. But thought must connect these two acts, and in reality, in spite of the interposition of the common third and the complication it introduces, every man, in modern as in primitive society, lives by exchanging his products or his services for other products.

We now come to metallic money. Though this subject, as well as those of paper money and of international trade, ought to be treated in the same chapter as exchange, with which they are directly connected, yet in consequence of the full discussion they require, we are obliged to devote to them as many special chapters.

CHAPTER IV.

METALLIC MONEY.

I. Why the Precious Metals have been chosen as the Instrument of Exchange.

The purpose of serving as the *medium* of exchange has not been assigned to objects in consequence of any express agreement, but certain substances have forced themselves upon men's choice because of particular advantages which fitted them for so high a function.

In patriarchal societies it was the universally sought-for wealth, cattle, whether kine or sheep, which appears to have filled this part of "third" commodity, and many of the Indo-European languages, and even the Basque tongue, have handed down to us the remembrance of this early form of money in the very name which they give to it. The most familiar instance of this is the Latin *pecunia*, which originally meant cattle or herds.

In other countries and according to circumstances many other commodities have served as a common third; *e.g.* rice in Japan, bricks of tea in Central Asia, furs in the Hudson Bay Territory, glass beads and pieces of cotton in Central Africa, salt-bars in the Kingdom of Dahomey; but a certain class of objects have had the privilege of attracting man's attention in all societies which are in the least degree civilized, and have not been long in dethroning every other article. I refer to the metals which we call precious, — gold, silver, and copper.

Thanks to their chemical properties, which make them comparatively inoxidizable, they have been granted us by nature in a crude state, and thus men have known and used them before their metallurgical attainments enabled them to become acquainted

with and use other metals, such as iron. It is remarkable that the old legend of the four ages of Gold, of Silver, of Bronze, and of Iron, places the four metals in the very order in which man must have become acquainted with them. Their no less noteworthy physical properties, brilliancy, color, and malleability, which have made them the objects of search from an early date either for ornament or for some industrial labors, would also account for the important part they have played in all times and with all peoples.

Nevertheless they owe the undisputed position they hold to-day in consequence of higher qualities and of a manifest superiority over every other commodity.

This superiority as a "third" commodity arises from the following causes (we have already seen the somewhat different causes which justified the superiority of the precious metals, not as the instrument of exchange, but as the measurers of value. These are not absolutely the same. See pages 74, 75):—

Firstly, easiness of transport. No other object has so great a value in so small a weight. The weight that a man can easily carry upon his back is just about half a hundredweight. Now more than half a hundredweight of coal is hardly worth 10*d.*; of corn, 5*s.*; of wool, from 20*s.* to 30*s.*; of copper, 42*s.*; of ivory, £26 to £30; of raw silk, £50; of silver, £150 to £200; and of fine gold, £3400.

Secondly, identity of quality. The precious metals being, chemically speaking, simple substances, are always of identical composition. An experienced merchant will be able to distinguish Odessa from California corn, or a tuft of wool from an Australian sheep from one taken from the back of a Spanish merino; but the most skilful goldsmith or the chemist armed with the most powerful reagents will find no difference between Australian gold and gold from the Ural Mountains. Here there is no need of samples.

Thirdly, difficulty of counterfeiting. The precious metals are recognizable at one and the same time by eye, ear, and touch,

from their color, weight, and ring, and are readily distinguished from all other bodies.

Fourthly, perfect divisibility. This divisibility must be understood not only in the mechanical sense (for gold and silver are wonderfully divisible either into threads or into plates), but also in the economic sense. Divide an ingot into a hundred parts, and you do not alter its value in the least; the value of each fragment is exactly proportional to its weight, and the value of all the fragments put together is exactly that of the original ingot.

Precious stones are superior to the precious metals in the first of the above requirements, viz. great value in small bulk, but in all the rest they are much behind. They are very variable in quality, liable to be successfully imitated, and in particular cannot be divided without their value being, so to speak, annihilated.

Fifthly, indefinite durability. In consequence of their chemical properties, which make them refractory to almost all chemical combinations, and especially to oxidization, gold and silver can be kept for an indefinite period unchanged. There is no other body of which that can be said, and, when it refers to a body which is to typify and to store wealth, it is an incomparable advantage.

II. The Invention of Coined Money.

It is one thing to employ the precious metals as instruments of exchange; it is another matter to use actual money. This has required an evolution which has passed through several very distinct stages.

Firstly. A beginning was made by the use of the precious metals in the shape of raw ingots; in every act of exchange, therefore, these ingots had first to be *weighed*, and then to be *assayed*. The legal forms of the ancient Roman law, such as *mancipatio* with its *libripens*, remind us of the days of the weighing of the instrument of exchange, whether silver or bronze. Even now in China, where coined money is not in use, traders carry their scales and touch-stone hanging from their girdles. Compare with this what

Lenormant says in the first chapter of his *Monnaies et Médailles.* "Great and powerful empires like those of Egypt, Chaldæa, and Assyria, passed thousands of years in wealth and prosperity, with as extensive commercial relations as can have been carried on by any nation of antiquity; they constantly employed the precious metals in business matters, but were absolutely ignorant of the use of money."

Secondly. Growing weary of performing this double operation at each exchange, men conceived the idea of using cut ingots, whose weight and standard were fixed beforehand, and guaranteed for use by some official seal or stamp. The lawgiver who conceived this brilliant idea may justly boast of having really invented money; from that time forward ingots are no longer *weighed*, but are *counted;* this tale or counting is the special characteristic of money. The Greek race, to whom mankind owes so many fertile ideas, must also claim the honor of this. Specimens are still extant of silver money from the isle of Ægina, and of a gold coinage from Lydia, both almost contemporaneous, seven hundred or eight hundred years B.C., and having the ovoid form of the primitive ingot.[1] It is difficult to tell which was the earlier of the two. In China, ingots sometimes bear the trade-mark of certain business houses, which certifies to their weight and standard.

Thirdly. There was still another step to be taken. Not only is the cubical or the irregular shape of the ingot an inconvenient one, but also, in spite of the impression of the stamp, nothing is easier than to clip the coin without leaving any traces of this debasing. It would always be prudent to weigh it to make sure of its being intact. To remedy these practical difficulties men have been led to adopt that form of coined money which is familiar to all civilized people; to wit, small discs covered with impressions in relief on the whole of the surface, on face, reverse, and edge, so that the

[1] The gradual change in the oval or bean-shaped ingot with the anvil stamp upon it is traced by Mr. C. F. Keary in his paper on the "Morphology of Coins" (*Numismatic Chronicle* (London), Vol. V, 3d series, pp. 165 *seq.*, 1885-6). — J. B.

piece cannot be tampered with without simultaneous alteration of the design which covers it entirely. Henceforward that type of the piece of money has been reached which for centuries has not been sensibly modified, and for which we can adopt the definition given by Stanley Jevons, "Coins are ingots of which the weight and fineness are guaranteed by the State, and certified by the integrity of designs impressed upon the surfaces of the metal." — *Money*, page 57.

III. The Conditions to be fulfilled by All Good Money.

All legal money should have an intrinsic value rigorously equal to its nominal value.

We know that money has a twofold function conferred on it by law, that of being the only instrument of purchase and of payment; in other words, it cannot be refused in payments, either by sellers or by creditors. This privilege is what is called *legal tender*. But this privilege involves another condition, which we have just referred to. Here is a 20-franc gold piece. In engraving on this coin the figure, 20 francs, at the same time as the national arms, the government certifies that the piece really has the value of 20 francs, and that it may be received by all men in full confidence. If the coin has not the value ascribed to it, the State is committing a clear fraud. Unfortunately for many centuries governments were not too scrupulous as to this matter, but nowadays it involves a question of national dignity and loyalty to obligations in which no government would dare to be found lacking.

Every piece of money, therefore, must be looked at in a double light. In its capacity of coined money, it has a fixed value which is inscribed on one of its faces. As ingot, its value is proportional to the market price of the metal; for there are markets and quoted prices for gold and silver just as there are for corn or cotton.

Every time that these two values coincide, *e.g.* every time the

little ingot of 6 grammes 451 milligrammes of the fineness of 9 parts out of 10, which constitutes the French 20-franc piece, has a market-value of 20 francs (which corresponds to the rate of 3444 francs for a kilogramme of pure gold), the money can be said to be good, or, technically speaking, *right*.

It appears, however, that the gold ingot when once coined should be worth a little more than the raw ingot, for the same reason as every object is worth more when manufactured than when in the raw state; and the difference should be equal to the cost of making. Money, too, is really in the same case, but the expenses of manufacture are so small that no sensible difference is made. The Paris Mint charges 6 francs 70 centimes for coining a kilogramme of gold into money, or about 0.2 per cent. Thus in every 20-franc piece there is a difference of about 4 centimes between the value of the coin and that of the ingot. This slight difference might be avoided by the State gratuitously converting the ingot into money; *i.e.* by itself incurring the expenses of coinage. This is just what is done by England, and the English sovereign is thus the type of a perfect money. Its legal value and its market value are exactly identical.

If the value of the ingot is higher than that of the coin, if, for instance, the gold is legally worth only 20 francs, and the weight of fine metal it contains is worth 21 or 22 francs, the money is said to be *heavy*. That is an excellent fault; but still it is a fault, and, as we shall see, may have rather serious consequences. Yet we need not trouble very much as to such an eventuality. *Firstly*. Because it will not often happen that a government will strike too heavy money; if it does so, it can only be inadvertently, for that operation clearly causes a loss. To coin gold pieces of 20-francs' worth from ingots worth 21 or 22 would be as ruinous as for a manufacturer to make rails at £4 a ton out of iron worth £4 9*s*. *Secondly*. Even admitting that the event does come to pass, in consequence of certain circumstances to be investigated later on (*e.g.* a rise in the price of metal supervening on coinage), it cannot last long; for, if it were known that the 20-franc piece were worth

21 or 22 francs as bullion, every one of us, in order to realize this profit, would hasten to treat our money as merchandise, and sell it by weight, and this operation would continue till the gold pieces had altogether disappeared. This situation, we shall see later on, occurs not infrequently in countries using a bimetallist system.

If, on the other hand, the value of the ingot is less than that of the coin, if, for example, when the coin is legally worth 20 francs, the weight of metal it contains is worth only 18 or 19 francs, the money is said to be *light*.

Two reasons make this eventuality more to be dreaded than the other one.

Firstly. Inversely to the preceding, it may lead a government into temptation. To make 20-franc pieces out of ingots that are only worth 18 or 19 is an alluring undertaking for a needy and not too scrupulous government; and numerous governments, in truth, have succumbed to the temptation. It is enough to recollect the epithet of "base coiner" with which public resentment has stigmatized the memory of several kings of France, — Philip the Fair, for instance. "*Falsarii publici*" was the term used of such kings.

It is well known that the monetary unit under the old *régime* of France was called the *livre* (pound); but it is not so generally known that this derived its name from the fact that originally, say in the days of Charlemagne, it actually represented the weight of a pound of silver (the Carolingian pound of only 408 grammes); *i.e.* it represented a value equal to that of more than 82 present-day francs (making allowance for all variation in the purchasing power of money). How has it fallen time after time down to that weight of five grammes which was the weight of the *livre* at the end of the old *régime*, and has become that of the present *franc*? Solely by a continual series of emissions of ever lighter and lighter money. Each monarch clipped a little off the weight of the old *livre* (pound) while endeavoring to preserve its former legal value. The history of the English pound is almost the same, though a trifle more honorable to the governments of

England; for having started from the same point of departure as the *livre*, it has stopped at the value of 25 francs, which is its present value.

Secondly. Further, once such light money has entered into circulation, it is not forced out by the stress of circumstances as occurs with heavy money; on the contrary, as will be seen when we come to Gresham's Law, all the trouble in the world is necessary to get rid of it.

To maintain the equivalence of the values of the ingot and of the coin, it is customary under every good monetary system to grant to every one who desires to convert an ingot into money the opportunity of so doing, of course not at his own house, but through the agency of the Mint. This is called "liberty of coinage." As long as this exists, it guarantees the equivalence; for if the value of the gold piece ever became higher than that of the ingot, every man would hasten to avail himself of the profit which would arise from the making of this money. Every one would buy gold ingots, and take them to the Mint to have them converted into coin until the diminution in the supply of the metallic gold and the increase in coined gold had restored equality between the two values.

Still, in all countries there are certain kinds of coins which do not satisfy the condition which heads this section; *i.e.* their intrinsic value is more or less inferior to their legal value. These are called "token" money. They are usually coins of little value, generally copper, but sometimes also silver, which are not customarily used for important payments, but only as odd amounts. On these conditions we may depart without inconvenience from strict principles. In France, contrary to the common belief, it is not only copper pieces which are token money, but also all the silver pieces except the *five-franc* piece. The intrinsic value of the *one-sou* piece is no more than one centime; that of the silver franc piece is no more than 75 centimes. We must note that copper pieces could not receive an intrinsic value equal to their nominal value without being burdened with very great weight, about five

times greater than the actual, which would be exceedingly inconvenient. There is another reason, as we shall see later on, for forcing the government to convert silver coins into token money.

Although the law gives up the strict principle, it still respects it in a way by refusing to all token money the character of legal money. No one is compelled to receive it in payment. For copper pieces the limit is a sum higher than five francs, for silver pieces (except the five-franc piece) a sum above 100 francs. In these cases the French law suspends liberty of coinage, for without this every one would coin this token money to gain the difference between its real and its legal value. The government reserves to itself the right of issuing a large enough quantity to satisfy public requirements, and should make it a rule never to issue too large a quantity.

IV. Gresham's Law.

"In every country where two legal moneys are in circulation, the bad money always drives out the good."

In these terms is expressed one of the most curious of the laws of political economy, which has been named[1] after the commercial adviser of Queen Elizabeth, who is credited with its discovery three centuries ago. But long before him, Aristophanes, in the *Frogs*, had pointed out and carefully analyzed this curious fact; viz. the preference men always have for bad money.

"The public has often seemed to us to treat the wisest and the best of our citizens just as it does old and new coins. For we do not use the latter at all, except in our own houses or abroad, though they are of purer metal, finer to look at, the only ones that are well coined and round; on the contrary, we prefer to use vile copper pieces, struck and stamped in the most infamous fashion." — ARISTOPHANES, *Frogs*, vv. 718–726 (Brunck's ed.).

The particular strangeness of this fact and of the law which expresses it, arise from the circumstance that it would be incomprehensible in the case of any other article. It would be impos-

[1] Mr. H. D. Macleod first gave currency to the expression "Gresham's Law." It is simply a particular case of the general principle, "greatest gain with least outlay"; "buy in the cheapest market and sell in the dearest."

sible to understand how it was that men should have such bad taste as to prefer, in general, bad to good merchandise. The economic organization of all our societies which possess liberty of labor and competition can only work in so far as we grant as an axiom the very opposite; viz. that under all circumstances men will prefer the product which is of the better quality and of the higher value. Why reverse this when money is the article in question?

Our astonishment vanishes when we reflect that money is not, like other wealth, destined either for our consumption or for production, but is merely for exchange. Of two fruits, we prefer the more luscious; of two machines, the one which works the better; but of two pieces of money of unequal quality it matters little to us whether we employ one or the other, for they are not for our personal use, and are only to pay our creditors and our tradesmen. Now, we have no motive to choose the better article for this purpose; on the contrary, it is to our interest to choose the worse, and we do not fail to consult our interest. The only condition is, that the creditor or tradesman shall not be able to refuse it; in other words, that the bad money shall have paying power as well as the good. It is on this very hypothesis that Gresham's Law is applicable; *i.e.* when both of the moneys in question are legal moneys.

The foregoing explains why the bad money remains in circulation, but not why the good disappears. What becomes of it, then?

It goes in three different ways: by hoarding; by selling by weight; and by payments to the foreigner.

Firstly. Hoarding. When people want to lay by money for possible emergencies, *i.e.* when they wish to keep it for themselves, they comply with the general rule and are careful not to fix their choice on bad pieces. On the contrary, they choose the best, because it is these that offer them the most security. The panic-stricken people who wished to hoard money during the French Revolution did not waste their time in hoarding *assignats*, but laid hold of good *louis d'or*. In this manner, especially at critical

times, a considerable amount of the best money may disappear from circulation. Still, this first cause of loss is a comparatively trivial one, and in any case does not last for a long time.

Secondly. Payments to the foreigner have a greater effect. Although a country need never pay in coin for more than a small part of its imports, still it has always to send abroad remittances in specie. Now, though to pay our home debts to our fellow-citizens we have by law the opportunity of using bad money as well as good, this alternative fails us when we have to settle for a purchase made abroad. As the foreign creditor is by no means obliged to accept our money, he will only take it for the weight of fine metal it contains; *i.e.* for its actual value. Therefore, we cannot dream of sending him light money. Let us keep that, then, for home trade, since in that quarter it is as serviceable as the other, and let us reserve the good money for foreign trade. This is the second and a highly important cause of the loss of good money. It is curious that Aristophanes had already noticed the fact that the public, which prefers bad money, employs good money "for indoor use [hoarding] and outside the frontiers [foreign trade]."

Thirdly. But the cause of the most rapid disappearance of good money is sale, *sale by weight.* Selling money by weight! Surely that appears to be a curious business, and its use does not seem easy to explain. Nevertheless, it is very simple. As soon as, in consequence of a rise in the value of gold, the gold coin acquires an intrinsic value which is higher than its legal value, — as soon as it is worth more as an ingot than as a coin, — it is clearly to people's interest to cease to use it as a coin, and to employ it as bullion. It is therefore withdrawn from circulation, and finds its way to the market for precious metals. If the value of bronze were to rise a great deal, is it not almost certain that numerous articles made of bronze, such as bells, cannons, statuettes, etc., would be melted down, so as to realize the value of the metal they contain? Or further, if we suppose that the value of paper was to increase very much, would not many books be pulled down from library shelves to be sold by weight to the waste-

paper dealer? It is just the same with money. When the precious metal rises in value, the pieces of money coined from that metal lose their character of money, and become articles of merchandise that all men hasten to realize; *i.e.* to sell.

Gresham's Law is applicable in the following cases:

Firstly. Every time that a worn money is in circulation together with a newly coined money.

It was under such circumstances that the law was observed by Sir Thomas Gresham. At that time a new coinage had been struck to replace what was then in circulation, which was altogether depreciated far more from clipping than from wear; and it was noted with dismay that new coins speedily disappeared whilst the old ones were more abundant than ever.

Unless, then, a government resorts to frequent new coinages, it will later on encounter great difficulties in replacing the old and worn-out coinage by the new.

Secondly. Every time that a depreciated paper money is in circulation together with a metallic money.

Under these conditions, if the depreciation of the paper is even for the shortest time at all serious, the coin is driven out on the largest possible scale. Thus, of late years the whole of the Italian money was driven into France. Vainly did the Italian government adopt various measures to cause its return, and even obtain from the French government an interdiction on its circulation in France. They would never have succeeded had they not attacked the evil at its root by withdrawing the paper money, or at least denying to it its forced circulation.

We have seen the two countries which are the producers of the precious metals, the United States and Russia, fail in their attempt to keep at home that metallic money, the raw material of which they furnished to the whole world. Useless were their endeavors to strike a new coinage; it was always pitilessly driven out by their depreciated paper money.

Thirdly. Every time that a light money is in circulation together with a right money, or even when a right money is in circulation together with a heavy money.

In this case, the lighter of the two moneys drives out the other. This is by far the most important of the three cases; it occurs in almost all the countries which adopt at one and the same time both a gold and a silver coinage. This case will be examined in the discussion of monometallism and bimetallism, of which we propose to speak in the ensuing section.

THE QUESTION OF MONOMETALLISM AND BIMETALLISM.

I. The Necessity of taking Several Metals, and the Resulting Difficulties.

The discussion which has long been waged over this celebrated subject does not, as might be thought, turn upon the question, whether a country should employ several metals in its monetary system, or should content itself with only one. That question does not even arise; for it is evident that every civilized country is obliged to employ at the same time gold coins, silver coins, and coins either of copper or of some similar metal. For example: how could one dream of using gold alone? The gold five-franc piece used in France is of itself inconvenient enough because of its smallness: what, then, would be a gold *sou?* A mere, impalpable grain! Far less, unless we were to revert to the days of Lycurgus, could we dream of using only copper; for a twenty-franc piece in copper would weigh half a score of kilogrammes. Even silver, though less inconvenient on account of its intermediate value, would not suffice by itself; for the five-franc piece is already too large, and the twenty-centimes piece is too small for ordinary use. We are obliged, then, to use all three metals at the same time.

But there is no necessity to use all three as *legal money;* in fact, we know that one of them, copper, has never that quality, and is always token money or small change. The other two, then, are to

be dealt with. Are both of them to receive the character and attributes of legal money, or is one only? This is what used to be called the question of the single or the double standard, but it is now more correctly termed monometallism or bimetallism.

If we grant the title of legal money to only one of the two, — say gold, — there is then no difficulty. The silver coinage, like the copper coinage, is relegated to the rank of token money; a purely conventional value is given it, but no one is obliged to receive it in payment. The gold coinage is the only one which has legal tender, and for which we need trouble to maintain a perfect equivalence between its legal and its intrinsic value.

If we allow both coinages to assume the character of legal money, the situation becomes far more complicated. For a better understanding of these difficulties let us take the French system, which may be regarded as the type of the bimetallist system, and look back to the time when it was entirely reconstructed by the legislature (the law of 7th Germinal, An XI, March 28th, 1803).

The unit of money was the old *livre*, converted into *francs*. It was a silver piece, and silver was therefore taken as legal money; indeed, at that time none would have dreamt of denying it that title. The same character had also to be allowed to gold.

For the sake of clearness let us take the two similar coins which are both of them to be found in the French monetary system, — the silver five-franc piece and the gold five-franc piece. We desire both of these to be legal money. It is necessary, then, for both of them to possess an intrinsic value which is rigorously equal to their legal value; that, as we know, is a *sine qua non*. It is not difficult to satisfy this condition as far as concerns the silver coin. Silver is worth, or at any rate was worth at the date we have harked back to, 200 francs a kilogramme; an ingot of 25 grammes, therefore, was worth exactly five francs; we must consequently give a weight of 25 grammes to our silver five-franc piece. With regard to that, then, the requisite condition has been fulfilled. But what weight must we give to our gold five-franc piece? At that time a kilogramme of gold was worth 3100 francs (of the

same fineness as the silver coin, 9 parts in 10). If, then, 620 coins are struck from one kilogramme of gold, each of them will be worth exactly 5 francs (for $620 \times 5 = 3100$), and will weigh 1.613 gramme. For the gold piece, too, the necessary condition will have been complied with.

Let us take these two coins and place them in the scales of a balance; we shall see that to keep in equilibrium the silver piece, we must put in the other scale 15 gold pieces, with a half over; or, if the reader wishes, to counterbalance two of the silver coins we have to put into the other scale 31 of the gold coins. That proves to us that the experiment has been successfully performed; for at that date the kilogramme of gold was worth just $15\frac{1}{2}$ times as much as the kilogramme of silver (3100 francs for the gold as against 200 francs for the silver kilogramme). Let us bear in mind that ratio of 15.5; it is the legal ratio between the values of the two metals, and is as celebrated in political economy as $\pi = 3.1416$ is in geometry. So far everything has gone beautifully, but let us wait for the end.

In 1847 were discovered the Californian gold-fields; in 1851, the Australian. The annual output of gold is therefore multiplied by 500,000,000 or 600,000,000 francs a year instead of about 100,000,000. On the other hand, silver becomes scarce in consequence of the development of trade in India which absorbs large quantities of it. The result is that the respective value of the two metals alters; in the market for precious metals, to obtain one kilogramme of gold, it is not necessary to give, as heretofore, $15\frac{1}{2}$ kilogrammes of silver; 15 are enough, or even $14\frac{1}{2}$; in other words, gold has lost more than 6 per cent of its value. Henceforward it is clear that these little ingots of gold which constitute the gold coins have undergone proportional depreciation; the five-franc gold piece is really worth only 4 francs 70 centimes.

What should be done to restore the equilibrium? Evidently the addition of a little more gold to each gold coin, about 6 per cent more; to restore the equivalence between the intrinsic value and the legal value, it is necessary that the silver five-franc piece should

counterbalance 15 or 14½ gold five-franc pieces. But then the whole of the gold coinage will have to be restruck? Let us wait a little.

Twenty years later, about 1873, there is another change. The silver mines discovered in the Western American States throw upon the market enormous quantities of silver; at the same time Germany adopts the gold standard, demonetizes her silver money and casts upon the market her thalers which she no longer wants. Once more the respective value of the two metals alters, but this time in the opposite direction. In the market for precious metals, for one kilogramme of gold one can get no longer merely 15½ kilogrammes of silver, but 16, 17, 18, 20, even as many as 22. In other words, silver has lost more than a quarter of its value relatively to gold. Henceforward it is clear that every ingot of silver which constitutes a silver coin, has undergone a proportional depreciation; the five-franc silver piece is really worth only 3 francs 50 centimes. What should be done to restore the equilibrium? Evidently to put far more silver into each silver coin, to increase their weight by a quarter, to make the silver five-franc piece weigh as much as 20 or 22 gold five-franc pieces; then the equivalence would be restored between the intrinsic and the legal value. But then the whole of the silver coinage will have to be restruck.

We ask ourselves in amazement, if we wish to preserve for both of our moneys the characteristics of right money, *i.e.* the rigorous equivalence between their intrinsic and their legal value, must we be incessantly recoining first one and then the other, in order to fit their weights to the variations in value of the two metals? That, it seems, is the inevitable conclusion. But it is impracticable and absurd!

A little reflection will show that it would be enough, if necessary, to alter the weight of *one only* of the two moneys, and take the other (always the same one) as the unit; for example, to take as unit the five-gramme silver franc, and alter the weights of the gold coins, sometimes above, sometimes below the legal weight, according to the variations in value of the metal gold. But in spite of this simplification, the process would scarcely be practicable.

Similarly, we might leave invariable the weight of the gold coins, efface the indication of legal value which is figured on their surfaces, and allow their value to oscillate freely according to the laws of supply and demand, just as in some countries, for example in Cochin China, there are variations in the value of the piastre. But then the gold pieces are no longer real pieces of money; they are nothing more than ingots which circulate like any other commodity. There will then be a quoted price for twenty-franc pieces, just as for cotton or for corn, and it will vary in the same manner. What a complication to introduce into business matters! what snares, especially for the unwary, to fall into!

The legislators of *Germinal, An XI*, when organizing the French monetary system, saw perfectly well the difficulties that might arise, and even proposed both of the remedies which we have just mentioned.[1]

II. How it is that Bimetallist Countries really have but One Money.

As we have just seen, every bimetallist system presents the serious disadvantage of not being able to maintain, for both moneys at once, that equivalence between intrinsic and legal value which should be the characteristic of all good money. Incessantly, according to the variations in value of the two metals, one of them will become too heavy or too light.

It might be thought, perhaps, that this disadvantage is theoretical rather than practical. What does it matter, one might say, whether our gold or our silver coins have a legal value a little above or below their real value? No one notices it, and in any case no one suffers from it.

That is a mistake; in such a situation there is a practical disad-

[1] For the arguments on the other side, see the Proceedings of the Bimetallic Conference (held in Manchester, April, 1888, and in London, December of the same year), and especially the speech of Professor Foxwell at the April meeting. — J. B.

vantage, and more than that, a real peril. It is this: the lighter money of the two will gradually drive the heavier out of circulation, so that every country, which is nominally under the double-standard system, as a matter of fact falls into the singular position of *never being able to keep in circulation more than one of its two moneys, and that money is the worse one.* A periodical movement of flux and reflux carries away the metal which is high in value, and brings back that which is low. This is nothing but the pure and simple application of Gresham's Law, which we have just studied, but the history of the French monetary system for the past forty years is a wonderful proof of it.

When under the Second Empire gold became low in value in consequence of the circumstances mentioned in the previous chapter, the French silver money began to disappear and to be replaced by gold coins, — by those beautiful Napoleons. This money people were not much accustomed to at that time; it was greatly admired, and in it courtiers hailed the wealth and the glory of the new reign; in reality it was only so abundant because it was made of depreciated metal. This phenomenon of the transmutation of metals is very easily explained.

The London banker who wished to obtain silver to send to India naturally tried to buy at the place where it could be got the cheapest. In London, for a kilogramme of gold he would not have been able to obtain more than 14 kilogrammes of silver. But by sending his kilogramme of gold over to the Paris Mint, he could have struck 3100 gold francs, and then exchanged these 3100 gold francs for 3100 silver francs, which weigh exactly 3100×5 grammes, *i.e.* $15\frac{1}{2}$ kilogrammes. Thus for his kilogramme of gold he had succeeded, in fine, in obtaining $15\frac{1}{2}$ kilogrammes of silver. The operation could also be performed in the reverse manner. A Paris banker put together 2800 silver one-franc pieces weighing exactly 14 kilogrammes ($2800 \times 0.005 = 14$). He sent these 14 kilogrammes of silver to London, and obtained in exchange 1 kilogramme of gold, since that was the market value of these two metals. He then had his kilogramme of gold sent back

from London and had it coined at the Paris Mint into 3100 gold francs. Thus his gross gain on the transaction was 300 francs, or rather more than 10 per cent, and even when the cost of coinage and of transport had been deducted, the transaction was still extremely profitable. It is easy to see that, thanks to this trade, a certain quantity of silver money left France, and was replaced by an equal quantity of gold money. That is the very way in which Gresham's Law works; heavy money is replaced by light money. Silver coins were exported from France to India by whole ship-loads. They were bought for their weight in silver, to be sold to the Bombay and Madras Mints, and there converted into rupees. During this period those Indian Mints turned into rupees more than two thousand million French silver pieces.

It was not long before there was a veritable dearth of silver money. In the old days prohibitive measures would have been speedily resorted to, to prevent the escape of this silver money, and penalties would perhaps have been inflicted on exporters. Economic science, by pointing out the cause of the evil, was enabled to offer a more efficacious remedy. Silver money was disappearing; why? because it was too heavy; it was enough, then, to lighten it by diminishing its weight or merely the proportion of fine metal, and men could be certain that its wings had been clipped; it would not stir henceforward. This was effected by mutual agreement between France, Italy, Belgium, and Switzerland by the convention of December 23, 1865. The standard of all silver coins, save five-franc pieces, was lowered from 900 parts out of 1000 to 835 parts out of 1000, a diminution in their value of rather more than 7 per cent. All those coins became then, and have since remained token money, and according to the invariable principles that obtain in this matter have since that date lost their character of legal money, and are only received as small money, up to the sum of 50 francs between private persons, but to any amount in public offices. Why was an exception made in the case of the five-franc piece? There was no sound reason for this, but it was France that insisted on the

concession. To turn all silver coins into token money would have been to entirely abandon silver money as legal tender; it would have been a clear adoption of the gold monometallist system, as in England, and such a revolution in their monetary system terrified the French government. The five-franc piece was therefore kept with its former weight and fineness and character of legal money. Naturally it continued to escape, but it could be more easily dispensed with than the smaller change; if need be, it could be replaced by the gold five-franc piece.

From 1870 onwards, we have seen that a reverse revolution was effected in the respective values of the two metals, and that the French monetary system was once more thrown out of order, but this time in the opposite direction. It was the gold money which became too heavy, and consequently began to emigrate; the silver became too light and began to swarm. The operations just explained were renewed, but the other way about.

A banker in Paris procures 3100 francs in gold, either in twenty-franc or in ten-franc pieces, it matters not which. That comes to exactly a kilogramme of gold. These the banker puts into a bag, and sends them off to London. In the London market for precious metals, for one kilogramme of gold 20 kilogrammes of silver can now be obtained. The banker, therefore, buys 20 kilogrammes of silver, sends them back to Paris, and has them turned into coin at the Mint. Since the Mint must strike from one kilogramme of silver either 200 one-franc pieces or 40 five-franc pieces, our banker receives $20 \times 200 = 4000$ francs in five-franc pieces, — a gross profit of 900 francs. Deduct the cost of carriage and of coining, and also the premium necessary for obtaining gold pieces if they have become scarce, and none the less the transaction will be exceedingly lucrative. It is clear that for France the effect of the operation is this: There is a decrease in gold money and an increase in silver money. Were it repeated indefinitely, the result of this simple operation after a certain lapse of time would be to entirely substitute in the circulation silver money for gold money.

It was necessary then that the Powers who had formed the Latin Union (Greece having also joined it) should set to work to remedy this new danger. Just as in 1865 they had stopped the flight of silver money by lowering its standard, so too they would have been able to prevent the departure of gold money by lowering its standard or diminishing its weight. But these constant recoinings, first of one money, then of another, would have ended in the disorganization of the whole monetary system. It was thought advisable to resort to a more simple plan. The convention of November 5, 1878, *completely suspended the striking of five-franc pieces*. Henceforward the transaction just described became impossible; there was no longer any profit in buying silver ingots abroad, for they could no longer be coined into money in France.

This measure, too, fully succeeded in preserving for France her fine stock of metallic gold, which had not yet been sensibly drawn upon. But, as can easily be believed, this convention, which closed to the metal, silver, a market of nearly eighty millions of men, and thus remarkably restricted its sale, had the effect of hastening still more the depreciation of the metal silver; in other words, of aggravating the evil. Then the metal silver, which till that time had not lost more than 10 or 12 per cent of its value, was seen to fall, flight by flight, down to the price at which it was in August, 1886, of 140 francs per kilogramme, instead of its legal price of 200 francs (corresponding to a ratio of 1 to $22\frac{1}{2}$ between the values of the two metals).

Since then there has been a sensible rise, and now (July, 1890) the price is 170 francs per kilogramme, or a ratio of 1 to $18\frac{1}{2}$. But this rise seems to be partly factitious and due to speculation. Even now the coining of silver money has not been resumed, and no one can say if it ever will be. Henceforward we can say that though the countries of the Latin Union are still legally under the bimetallist system, they have in reality almost become gold monometallists. *Of all their silver coins, there is but one which is legal money, and that is the very one which is no longer struck!*

III. Whether it is Advisable to adopt the Monometallist System.

After the foregoing explanation there seem to be no grounds for hesitation. The monometallist system is infinitely more simple than the bimetallist. It cuts short all the difficulties we have just pointed out. Why hesitate, then?

That is the very line of argument that is taken up by nearly the whole Classical school of economists; for them monometallism is almost like free trade, an article of faith.

Besides, it is the system which has long been adopted by the first commercial nation in the world, England (since 1816), and several other countries have followed in her footsteps, to wit, Portugal, Germany (in 1873), the three Scandinavian states (in 1875). Nevertheless, the bimetallist countries — first of all, the group of the Latin Union, comprising France, Italy, Belgium, Switzerland, and Greece; then other European states which adhere to the same régime, Holland, Spain, Roumania, Servia, etc. (Russia and Austria are also reckoned among the bimetallist nations, but in fact they have scarcely any metallic money and are under the paper money system), and finally the United States of America — have never yet consented to abandon their system, nor do they seem inclined to do so. On the contrary, in the frequent Congresses which have met of late years, they have attempted, though without success, to bring back to the bimetallist system the States which have abandoned it. It should be noted that the United States have not taken the same ratio between the values of the two metals as has been adopted by the Latin Union; between the gold dollar and the silver dollar the ratio is 1 to 16. The United States would long since have become monometallist, like England, were it not for the necessity of keeping a market open for their rich silver mines. But, as a matter of fact, their silver dollars scarcely circulate at all. For that reason, in accordance with the Bland Act, which has made much stir, they still coin 2,000,000 of dollars a month, and now, in consequence of the passage of the

Silver Bill, 4,500,000 ounces are to be bought monthly at market prices, and 2,000,000 of these are to be coined into silver dollars until July, 1891. The reason for all this hesitation is, that the adoption of the monometallist system is not without disadvantages, nay, even dangers, both for the present and in the future.

Firstly. The first disadvantage is that the adoption of the gold standard involves the demonetization of silver; for if the five-franc piece is deprived of its character of legal money, it must also be withdrawn from circulation. Now there are in France, roughly speaking, three thousand millions of these coins, but if sold for their weight in silver they would hardly be worth more than two thousand millions. The cost of this step, then, would amount to about one thousand millions, and perhaps more, for it is perfectly evident that such a measure would inevitably hasten a further fall in the value of the metal silver.

Perhaps it will be said that the State would have nothing to do but to allow the loss to fall on the holders of five-franc pieces. In the first place, that would scarcely be an honorable proceeding for the State, which has guaranteed the value of these pieces by stamping that value on the coin itself; and in any case it would ruin the Bank of France, which has in its cash reserve more than 1,200,000,000 francs in silver; on these it would lose at least 400,000,000, or more than double its capital!

When, in 1873, Germany wished to demonetize her silver money, she was obliged to desist from carrying out the transaction in its entirety because the cost was too great; yet the fall in silver then was far from being what it has since become.

Secondly. A second disadvantage is, that if all countries took gold as their standard, there is reason to fear that the supply of the metal would no longer be sufficient for all requirements. The production of gold is already beginning to diminish. The quantity annually produced in the mines, which fifteen years ago was more than 600,000,000 francs, has fallen to about 500,000,000; and then it must not be forgotten that at least half of this product is absorbed for industrial uses. It is possible, however, that the

working of the recently discovered mines in the Transvaal may largely swell the production of gold.

Still (from the bimetallist point of view) there is reason to fear that gold, becoming at the same time scarcer and more sought for, will greatly rise in value. What does that matter? some may say; the only consequence is that with a twenty-franc gold piece a man will be able to obtain twice the quantity of goods he formerly could. What is the harm of that? The harm lies precisely in the general fall in prices which is presupposed by such an hypothesis. It is already the opinion of many economists that the crisis which all producers have complained of for several years past has no other cause than the *appreciation* of gold, as it is called, *i.e.* its rise in value occasioned by its scarcity; their conclusion is that the general adoption of the monometallist system would seriously aggravate this scarcity, and consequently heighten the crisis itself.

To this the partisans of monometallism reply that the improvement in means of credit, which enables men to more and more easily dispense with metallic money, more than compensates for this diminution, and the answer appears to be well founded (see "Paper Money").

Thirdly. Finally, the third disadvantage is, that variations in price are far more to be feared with a single standard of values than with two.

When there is but a single money for the measurement of values, the consequence of every variation in the value of this money is an inverse variation in prices, and these variations, if at all frequent or sharp, throw out of working the whole commercial organization, and provoke the crisis.

When, on the other hand, two moneys are employed for the measurement of values, a kind of *compensation* is set up between the two which is very favorable to the stability of prices, and therefore to the prosperity of trade; for in business stability is always of the highest consideration. The explanation of this phenomenon of compensation is rather subtle, but it is not difficult to grasp its main idea.

It is enough to recollect that the principal cause of the superiority of the precious metals as the measure of values arises from the fact that their variations in quantity are a small matter when taken relatively with the existing mass. But this condition is the better fulfilled, the larger the amount of the stock of metal, and the more varied the sources which supply it. When it is composed of two metals, it will, to begin with, form a double mass, and further, as it is hardly probable that the causes which bring about a glut of production of one or other of the two metals will coincide in the case of both, the variations will be less felt. Similarly, the rises in level of a river are less sudden and less to be feared, the more numerous its tributaries are, and the more distant and the more varied in geological and climatic features the districts in which they take their rise. From this point of view it is better that our reservoir of metals should be fed by two tributaries, gold and silver, rather than by one only, and were there three or four, that would be better still. Indeed, had there been but the metal gold, the discovery of the Californian and Australian gold fields would have caused the utmost perturbation through an excessive rise in prices. Their exhaustion would cause a still more formidable shock. It does not greatly matter whether prices be high or low; the point of cardinal importance is that low prices shall not abruptly follow on high prices, or *vice versa*.

We can now very easily understand why the bimetallist countries hesitate to adopt monometallism; however weak be the thread which still binds them to bimetallism, the cutting of it may cost them dear. For the moment they feel sufficiently protected by the law which prohibits the coinage of silver money — in fact, since that law came into operation, the quantity of gold in France has not been observed to diminish in disquieting proportions — and postpone their decision till a more favorable occasion; for example, the time when the opening up of China or of Central Africa to European trade will result in heightening once more the value of the metal silver. Indeed, this *status quo* policy appears to be the wisest. There is no great evil, nay, there is even some

good, in the circumstance that the world comprises at one and the same time, gold monometallist countries, silver monometallist countries (such as China and India), and bimetallist countries which serve as connecting links between the two. No doubt the bimetallists are in a somewhat difficult position; they have always to defend the one of their two moneys which happens to be appreciated, but they can succeed in this to a certain degree; further, even if they should be obliged to send abroad part of the appreciated money, as they would not do this for nothing, and would make the receivers pay a premium on it, in the long run the matter would be a business transaction just like any other operation, and no great harm would result.

IV. Whether the Respective Value of the Two Metals could not be fixed by an International Understanding.

The partisans of bimetallism go even further; they assert that none of the difficulties, which appear to be inherent in the bimetallist system would be produced, were that system sanctioned by an international agreement between all civilized peoples, on the basis of the $15\frac{1}{2}$ ratio or some other ratio.

It is this assertion that particularly outrages the feelings of economists of the Classical school. It would be impossible, say they, for the will of one government, or even of all governments together, to fix the respective values of gold and of silver *ne varientur*, any more than the respective values of oxen and sheep, or of corn and hay. The value of articles is solely determined by the law of supply and demand, and is altogether beyond the scope of legislative regulation; the value of the precious metals is no exception to the rule.

In our opinion, this line of argument of the Classical school is a little too unqualified. Gold and silver are not commodities which can be likened to oxen or sheep, or any other article, for the reason that their principal utility is to serve for the fabrication of money. When, therefore, we speak of the demand for the

precious metals, we must understand by that almost exclusively the demand made by a dozen governments for their Mints. Now there is nothing absurd in thinking that if these dozen buyers agreed among themselves to fix the respective prices of the two metals, they could not succeed in so doing. If they announce that they will all buy the kilogramme of gold at the rate of 3100 francs, and the kilogramme of silver at the rate of 200 francs, it is highly probable that they will give the law to the market. The Classical school say that it would be absurd to decree that an ox shall always be worth ten sheep, or a bushel of corn two bushels of hay. Certainly; for the market for those commodities is unbounded, and each man of us, by his personal tastes, shares in regulating current prices therein. But if in the whole world there were only a dozen people who consumed beef or mutton, it is highly probable that, by concerting together, they might succeed in fixing the relative prices of oxen and sheep on the basis of 1 to 10, or on any other scale they might think fit. This occurs frequently enough in commercial speculations in the shape of combinations between large dealers.

No doubt, this conclusion must not be pushed so as to become absurd. It is evident that it would never be within the power of governments, even were they unanimous, to decree that the ratio between gold and silver shall henceforth be equality, or further, that it shall be reversed, and the kilogramme of silver be worth $15\frac{1}{2}$ kilogrammes of gold. Why would such a decree be a dead letter? Because the industrial use of the precious metals, though of less importance than their use as money, should, nevertheless, not be neglected, and would suffice to prevent the fixing of so extravagant a ratio as that just instanced. All the governments in the world would decree in vain that silver shall be worth as much as gold; men and women will never pay the same price for a silver watch or ring as for a gold one. The price of gold would always remain far higher than that of silver in the market for precious metals, and would therefore be much above its legal value. Thence would result the consequences of Gresham's Law, which are now so familiar to us.

Let us add that if, on the hypothesis, the value of gold were successfully maintained at the same level as that of silver, since the cost of production of gold is far higher than that of silver, the gold mines would soon be abandoned, on account of no longer giving any profit, and such a measure would finally result in the stoppage of all production of gold after a shorter or longer lapse of time. Similarly, if an ox were deemed to be worth no more than a sheep, and that basis of valuation were successfully imposed, we may take it as sure that no one would continue to breed oxen, and that after a certain time the very race of oxen would have disappeared.

But within reasonable limits, we do not hesitate in believing that an international agreement would be efficacious in fixing the respective values of the two metals, and consequently in doing away with the chief disadvantage of bimetallism, the disappearance of one of the two moneys. For whither would it go, seeing that in every country it would be subjected to the same law? If at present gold tends to escape from France to England, that is because gold is worth more in England than in France; in France it is worth only $15\frac{1}{2}$ kilogrammes of silver, in England it is worth 18 or 20; but, if in England, too, its worth was fixed by law to be no more than $15\frac{1}{2}$ kilogrammes of silver, where would the exporter's profit come in? If in France an ox could not be sold for more than one sheep, all oxen would assuredly be sold abroad; but if abroad, too, they were treated exactly on the same footing, they would remain where they were.

I know the diff between these 3 kinds of paper

CHAPTER V.

PAPER MONEY.

I. Whether Metallic Money can be replaced by Paper Money.

WERE we not already aware that paper money can be substituted for metallic money, we might have some difficulty in believing it to be possible, and the title of this chapter might excite our wonder.

It is obviously impossible to replace corn or coal or wealth of any other sort by mere pieces of paper, on which are engraved the words, "so many bushels of corn" or "so many hundredweights of coal." From such paper we cannot obtain food or warmth.

Were we to use coins to hang round our necks, just as Eastern women wear their gold or silver sequins, once again our scraps of paper would be useless. But money is not like other wealth; there is no material element in its utility. A piece of money, a coin, is in fine nothing but an "order," which entitles us to claim by means of exchange a certain portion of existing wealth, or to pay our debts. That part can be played by a piece of paper just as well as by a fragment of metal.

The matter will be clearer if we distinguish between three kinds of paper money.

Firstly. *Representative* paper money merely represents an equal sum of coin, which is deposited somewhere, say in the coffers of a bank, and serves as a security for it. Thus, as the people of the United States are not enamored of silver dollars, the government of that country keeps these dollars in its coffers and storerooms, and replaces them in circulation by silver certificates which, in virtue of being paper money, are much more handy to use. This first form of paper money presents no difficulties.

Secondly. *Fiduciary* paper money takes the shape of a credit paper, or, properly speaking, a promise to pay a certain sum of money. It is clear that the value of the document depends entirely upon the solvency of the debtor; but, if perfect trust can be placed in this solvency, and, to use the business phrase, the signature is worth money, there is no reason why this strip of paper should not circulate as easily as metallic money. We shall see that bank notes usually fall under this head, though in certain respects and according to circumstances they may belong to the first or the third category.

Thirdly. *Conventional* paper money represents nothing and gives a claim to nothing; for that reason the term "paper money" in the strict sense of the word is usually confined to this kind, which generally consists of strips of paper which are issued by a State which has no coin. No doubt they are inscribed with the words, "£5 note, £10 note," etc., and thus, like the preceding forms, they present the appearance of a promise to pay a certain sum of money. But that is known to be a pure fiction, and every one is aware that the government will never redeem them, for it has no money for that purpose.

It is especially in this third form that the substitution of paper money for metallic money seems hard to understand, nor is the matter a simple one. Yet the experiment has often been made in all countries, and has proved that under certain conditions the substitution is possible, and that the public can fall in with the process well enough. This system has prevailed in Russia and the South American republics for several generations, and why not, indeed? If — in accordance both with law and with the general consent, which must always ratify to a certain extent the declaration of the lawgiver — these white or blue strips of paper are invested with the property of paying for our purchases, discharging our debts, and settling for our taxes, why should they not circulate just as well as white or yellow coins? Coins serve us no other purpose than that.

Yet in spite of this circulating faculty of paper money, we must

confess that between its value and that of metallic money there will always be several important differences. The value of paper money will always be more precarious, more restricted, and more variable.

Firstly. The value of paper is *precarious*, for it rests entirely on the will of the legislator, and can be annihilated by the very law which has created it. If the law demonetizes paper money, the holder will retain in his possession nothing but a worthless rag, for when it has lost its legal value it has lost all. The same does not altogether hold good of metallic money; for besides its legal value it has also a natural value, which is due to the physical and chemical properties of the metal of which it is composed. No doubt, if gold and silver were demonetized in every country, metallic money would lose the greatest part of its value. We must not deceive ourselves as to this matter; and the present fall in silver, caused by its demonetization in some countries, only too fully proves the fact. Yet many authors do harbor this illusion, or at any rate do not put their readers on their guard against it. Most of them seem to say that the government seal stamped upon gold and silver coins merely states their actual value, just as the tickets tradesmen put upon their goods. But the declaration that the six-gramme gold piece is worth twenty francs is not only *declaratory*, but is also *determinative* of value. It is because the will of the legislator, or, if it is preferred, the agreement of men, has chosen gold and silver as money, that these metals have acquired the larger part of their value; and they would lose it as soon as this agreement or this law happened to cease to exist. Aristotle, too, had perceived this very clearly. Says he in the *Nicomachean Ethics*, Book V: "It was through a voluntary agreement that money became the instrument of exchange. It is called *νόμισμα* (from *νόμος*, law), because money is not a natural product, but exists only through law; and it lies with us to change it and rob it of its utility as we will."

Still we must remark that there was nothing arbitrary in men's choice falling upon the precious metals, for it was dictated by

those very real qualities possessed by these metals, which we have already described. It is not then perfectly logical to argue on the opposite tack, as do some economists, notably M. Cernuschi, and to say that the value of the precious metals is purely conventional. For any object to acquire a recognized utility and value, in every case man's will and choice must intervene; but if this will and this choice are determined by natural causes, the resulting value is also natural and by no means conventional. Corn itself owes its value to the fact that most civilized men have chosen as their staple food this cereal out of many others; and, if ever they take another in its place, we may affirm that its value, too, will fall; but no one will dream of saying that the value of corn is conventional. It is the same with the precious metals. The only difference is that it is far easier to replace the precious metals as money, or even to dispense with them, than it is to do without corn.

Yet even on the hypothesis that demonetization would cause them to lose most of their value, the precious metals would still retain some utility, for the non-oxidizability of the precious metals would admirably fit them for some industrial uses, to which they cannot now be turned because of the excessive cost; and as such uses would become more important and more numerous in proportion to the fall in value of the metal, it is possible that this fall in value would not be so great as is believed. Let it descend to a third or a fourth of its present worth. The holder of coins would still possess a certain value that law could not deprive him of, — probably higher than that of any other commodity.

Secondly. The value of paper money is more *restricted*, for, as it is conferred by law, it cannot extend beyond the limits of the territory regulated by that law. Of course a Bank of France note can be accepted abroad by a money-changer, or by any one who is acquainted with the Bank of France, and knows the worth of its signature. But in that case the note is received not as money, but as a bill — that is to say, with the intention of having it cashed — just as in all countries notes signed by Rothschild would

be accepted. Paper money, then, cannot serve to settle definitely the international exchanges. On the other hand, as the value of metallic money is regulated by the metal, it is almost the same in all civilized countries; it can therefore circulate everywhere, if not as coined money, at least as bullion. That is why metallic money is essentially a universal and international money, whilst paper money is essentially national.

Thirdly. Finally, the value of paper money is more *variable* than that of metallic money, and this for the most excellent reason that the quantity of paper money depends only on the will of the legislator, whilst that of metallic money rests on natural causes; namely, the discovery of fresh mines. The former, therefore, is issued by man, the latter by nature. It is in the power of a careless legislator to depreciate paper money by issuing too large a quantity of it, and that power is too often exercised; but no government on earth is able to depreciate metallic money in such a manner. Even if only a fixed quantity of paper money were issued, the disadvantage would subsist, for wants vary according to circumstances. If a period of commercial activity, which requires an increase in the instrument of exchange, is succeeded, as is usually the case, by a period of depression, paper money will necessarily be found to be in excessive quantity.

It is true that the discovery of exceptionally rich mines may at a given moment throw upon the world a large quantity of the precious metals and thus effect a fall in the value of metallic money. It is also true that when a period of depression succeeds to a period of activity, the metallic money which has been attracted into a country may prove to be excessive in amount. The circumstance has occurred more than once; but these variations never possess the magnitude or the fatal consequences that belong to and result from every variation in the quantity of paper money, for they extend over the whole surface of the civilized world. Everywhere in request, everywhere accepted, the precious metals, if in excess in one country, soon flow spontaneously into other countries; whereas the sudden increases in paper money are dis-

astrous, since they are always confined within the limits of a fixed country which serves as a closed reservoir whence they cannot flow.

The above disadvantages, which render paper money so imperfect an instrument of exchange when compared with metallic money, are largely minimized when the government is a wise one and issues only that amount of paper money which is necessary for actual requirements and conforms to the rules set forth below. The disadvantages would almost entirely vanish, could we imagine an international agreement entered into by all civilized countries, by which they would all bind themselves: —

Firstly. To confer legal tender on one and the same paper money;

Secondly. Not to augment its quantity, or only to augment it in a proportion fixed in advance and calculated for each country; for example, according to the increase in its population.

In that case, the value of paper money, though always conventional, yet resting as it would henceforward on the unanimous consent of the nations, would rest upon almost as broad and as solid a basis as the value of metallic money itself, and would be less subject to vary, since its quantity, instead of depending on chance, would be regulated by a certain and fixed law.

II. Whether the Creation of Paper Money is Equivalent to a Creation of Wealth.

Who was the inventor of paper money? None can say. It was known in China from time immemorial. Antiquity has left to us several specimens of money, if not of paper, at any rate of leather, or of a purely conventional value, which were called *siege* money, because they had been generally issued in beleaguered cities to take the place of the metallic money which was growing scanty. Paper money was first issued on a large scale by the financier Law, in 1716; all the world knows the disastrous catastrophe to which his system led.

The men, who first conceived the idea of making paper money, flattered themselves that by so doing they were increasing the general stock of wealth, just as if they had discovered a gold mine or had effected the *magnum opus* of the transmutation of metals into gold, which was so long the dream of alchemists.

In this shape the idea was clearly absurd, for it presupposed the creation of wealth out of nothing. Still it has been ridiculed too much, for it is perfectly true that the emission of paper money may increase in a certain measure the existing quantity of wealth in a given country. But how? It was Adam Smith who first offered an explanation. He observes that the metallic money which circulates in a country is unproductive capital, but that the substitution of paper money, by setting free this capital, permits of its being utilized and turned to productive purposes. In the same way he said, in a comparison that has become celebrated, if we found the means of travelling in the air, we could restore to cultivation and production all the surface of the ground which is now occupied by roads.

Still this ingenious comparison of Adam Smith's leaves us not altogether satisfied. We can see clearly enough that from the time when roads and railways were no longer required, the ground they occupy might be cleared and thus put under cultivation and used for production (nearly a million acres in France alone); but it is not equally easy to see what could be done with metallic money from the time when it could be dispensed with for currency purposes. Should it be melted down to be made into gold or silver plate and earrings or pendants? The gain would be but scanty. No, it would be invested abroad; there the advantage would come in. France has a capital of about £320,000,000 worth of gold and silver currency. This enormous capital facilitates its trade, but yields no profit. But suppose we find a means of replacing it by paper money; then there are £320,000,000 which can be invested abroad, in the purchase of foreign stock, of railway shares, landed estates, or ships, or be devoted to the renewing of its manufacturing or agricultural machinery and implements;

these, in one way or another, would give an interest of five or six per cent, *i.e.* an income of £15,000,000 or £20,000,000. This might be likened to the case of a householder who, owning some scores of thousand pounds' worth of silver plate, comes to think that electro would serve him as well, and therefore realizes the capital stored in his silver plate for the purpose of increasing his income. The same is done by those well-informed persons of private means who, being well aware that money gives no returns whilst lying idle in their pocket or their strong-box, take care to keep no more in their houses than is absolutely necessary and invest all the rest. The wealthiest persons, especially in England, are often those who have least money at home. The peasant has a secret drawer in his cupboard full of napoleons and crowns, but the millionnaire pays his tradesman by giving him a check on his banker. Nations nowadays do the same; it is not always the richest that have most money. Thus while France has 8,000,000,000 francs in cash, England contents herself with £120,000,000: she has invested the rest.[1]

When, therefore, the question is asked, "Does it lie within the power of a government or a banker actually to augment the wealth of a country by the emission of paper money?" it is not perfectly correct to answer in the negative. As a matter of fact, the affair is feasible, but *only up to the total amount of metallic money in circulation*. By replacing the 8,000,000,000 francs in coin that France holds by an equal sum in notes, the emission of paper money could actually increase the wealth of France by 8,000,000,000 francs, or at any rate by the largest part of that sum.

But we must note that this gain would be realized only by some countries, not by all at once. One country can certainly productively utilize its metallic stock by selling it abroad; but if every country wished to do the same, it is evident that none of them

1 "Opinions differ as to the amount which is in circulation at this time, the estimates varying from 65 or 70 millions even up to 110 millions." Speech of Mr. G. J. Goschen, Chancellor of the Exchequer, at Leeds, on the 28th January, 1891. — J. B.

would succeed. Gold and silver specie being offered by all countries seeking to get rid of them, and being demanded by none, would become a drug on the market, and henceforward valueless. It is in this respect that Adam Smith's comparison fails in complete application. For, if the means of dispensing with roads were discovered, the result would be different; all countries could equally and simultaneously benefit from the new utility they would derive from the ground heretofore devoted to means of communication but henceforward available for productive use.

Still, even on that highly improbable hypothesis, mankind would always find it to its advantage to do without the precious metals. For it would save henceforth all the labor that is yearly devoted to the keeping up of its supply of metals, to turning the bullion into specie, to filling up the void caused daily by wear and tear and by accidental loss, and especially to keeping up the supply at the level required by a trade and a population that are ever increasing. Is this labor a small matter? The annual production of gold and silver for some years past has stood at the figure of about £40,000,000.[1] Now the precious metals fare like all other commodities; when there is no monopoly their value is practically regulated by the amount of labor they require. There is therefore every reason to believe that the world, in order to maintain and increase its supply of metals, has yearly, whether the year be good or bad, to support something like four or five hundred thousand laborers, the equivalent of a large army. Do away with the necessity of using the precious metals, and all these arms will become available for new production. So much the greater will be the productive power of humanity.

To sum up, we see that paper money increases the wealth of a country, not, as was formerly believed, in the proportion in which *it adds to the stock of metallic money*, but, on the contrary, in the proportion in which *it allows of a diminution in that supply*.

[1] For full particulars see the "Report from the Consuls of the United States on Bimetallism in Europe" and especially the translation (in Appendix) of Professor Soetbeer's paper on "Materials towards Elucidation of the Economic Conditions affecting the Precious Metals" (Washington, 1887). — J. B.

Such is the advantage that a *country* obtains from the emission of paper money. If we are now asked what is the advantage obtained from such an emission by a *government*, the answer is far easier to understand. When a government falls short of money, the creation of paper money is a very convenient means of paying its contractors, its civil servants, its soldiers, and its stockholders; in a word, it is enabled to meet all its expenses *without being obliged to borrow, and consequently without the necessity of paying interest.* Usually, when a government is in such a position, its credit is not of the highest; therefore, if it had to borrow, the rate of interest would probably be very high, and thus the use of paper money in such circumstances effects a saving which is by no means to be despised. Many States have had recourse to this expedient, and have in general come off well enough, with the provision, of course, that in their issues they do not exceed the limit we have laid down, which is represented by the amount of metallic money in circulation. The only result of every issue which exceeded this limit would be to lower prices, and to inflict on the country and on the government heavy losses, which would far more than counterbalance the saving to which we have just alluded.

During the Franco-German War the French government had need of money, and issued notes to the value of £60,000,000. If it had borrowed this sum, it would have had to pay six per cent, or £3,600,000, a year. Now this issue cost only £600,000 a year. Thus the direct issuing of this paper money, the cost of manufacture included, could have been effected without any actual outlay by the government; but it chose, for other strong reasons, to use the services of the Bank of France at the payment of one per cent commission. In the country itself there was altogether an insufficient quantity of money in circulation, arising either from the exportation of money for foreign purchases, or from its being used in payment of the war indemnity, or more probably from its being hidden. Thus the emission of these notes, by re-establishing the medium of exchange, was a benefit for all; nay, the amount

issued was actually not enough, for several loan societies were obliged to form themselves into a syndicate for the issue of fractional notes under five francs in value.

III. The Dangers resulting from the Use of Paper Money, and the Means of preventing them.

Thus the advantages that paper money can obtain, either for a country or for a government, are real enough, but they may be paid for dearly; indeed, may cost more than they are worth. Nay, some economists have actually gone so far as to say that the invention of paper money "has caused more calamities, done more harm, and killed more men than war itself."

Still it is advisable to remark that such grievous consequences are due rather to the imprudence of governments than to the essential nature of paper money. Experience has shown that, when the emission of paper money is entrusted to banks, instead of being carried out directly by the government, it is usually effected with far more moderation, and offers far fewer dangers. At the present day, therefore, most governments have adopted this plan. See in the chapter on *Credit* the section on "The Differences between the Bank-note and Paper Money."

Indeed, the ill effects of paper money are only produced when the government has chosen to overstep the limit we have marked out, and to issue it to an amount which exceeds the actual needs; and these requirements are themselves excellently measured by the amount of metallic money habitually in circulation. But that government would be rash which ventured to the very margin of this limit. For example, the French government would be daring if it issued 8,000,000,000 francs of paper money, relying on the statistics that this is the actual sum of the metallic currency of France; for a certain amount of smaller change must always be left in circulation, were it only token money. Nevertheless, an involved government is sorely tempted to cross this fatal limit; many have done so, and have ended in bankruptcy.

Every one knows the lamentable story of the *assignats*, which were issued by the Convention and the Directory, up to the extravagant figure of 40,000,000,000 francs which was probably twenty times higher than the amount of coined money then in existence. Even if the issue had consisted of good gold and silver pieces, it would, none the less, have induced a serious depreciation of metallic money, since the amount in circulation would have been twenty times larger than was required. We can therefore imagine what must have been the depreciation of a mere paper currency. The 100-franc *assignat* fell in value to a few halfpence, and a pair of boots was sold for twenty of them; *i.e.* at a nominal price of 4000 francs. The result was bankruptcy.

We may affirm that in the present state of economic science there is literally no excuse for any government overstepping the limit; for there are certain signs, familiar to the economist and to the financier, which betoken danger even when far off, and which give surer indications than the pilot can obtain from his sounding-lead or from his landmarks.

Firstly. The first is the *premium on gold*. As soon as paper money has been issued in too large a quantity, in relation to actual requirements, in accordance with the constant law of value it begins to be depreciated, and the first effect of this depreciation, its first indicating sign, though it is of itself not yet visible to the public, is that metallic money rises to a premium. For metallic money is not touched by this incipient depreciation of the monetary system. Why should it be? for gold and silver still retain their former value. Bankers and money-changers begin to seek it for the purpose of sending it abroad in the form of bullion, and pay a small premium to obtain it. It is now that the financier should keep his eyes open. When at the close of the war of 1870 France was under the paper money system, and all its gold went into Germany to pay the war indemnity, gold immediately rose to a premium of $2\frac{1}{2}$ per cent (fifty centimes on a twenty-franc piece). That was not a great rise, but it was enough to put the government on its guard, and the danger was averted.

Secondly. The second is the *rise in the rate of exchange.* Bills payable abroad, *i.e.* bills of exchange, occasion a great business movement in all the commercial centres of the world. They have a quoted price like any other commodity, which is just what is called the rate of exchange. Now these foreign bills are always payable in gold or in silver, more often in gold, since that is the international money. If then, for example, France is under the paper money system, and this paper begins to be depreciated, paper on London or on Brussels will rise in price just as gold itself, being in fact equivalent to gold; when, therefore, the twenty-franc gold piece is at a premium of two per cent and is sold for 20 francs 40 centimes, the 100-franc bill of exchange on Brussels will rise to an equal premium and be sold for 102 francs.

Thirdly. The third is the *flight of metallic money.* However slight be the depreciation of paper money, unless this is immediately remedied by the withdrawal of the excessive paper, and if it is allowed to continue and become aggravated, all the metallic money will speedily disappear from the country. This phenomenon is a sure characteristic, and is produced in all countries where the paper money system has been used in excess. We explained the reasons for this when dealing with Gresham's Law, and need not repeat them here.

Fourthly. Finally, the fourth sign is the *rise in prices.* This appears later on, and shows that the evil is already serious and that the allowable limit has been greatly exceeded. As long, indeed, as the depreciation of paper money is slight, say two or three per cent, prices (those of the precious metals excepted) are not affected. The hatter or the bootmaker will not raise the price of his goods for so trifling a difference, and even were he to do so, the public would not perceive it. But as soon as the depreciation of paper money reaches 10, 15, or 20 per cent, then all tradesmen and producers raise their prices in proportion. The evil, which till then had been in the latent state, suddenly bursts forth and fully displays itself to the public gaze.

Business men and producers are not disturbed by this rise in prices. They even find it highly agreeable, though in truth the pleasure is a deceptive one (for if they sell everything dearer, they have to pay more too), and even become so accustomed to it that they cling to the paper money system and oppose its abolition, because that would result in a return to the old prices. When the United States were under the paper money system, there was a whole party, significantly called *inflationists*, who moved heaven and earth to maintain that system and even now clamor for a return to it.

We must note that the old prices subsist for those who can pay in metallic money, that is to say, if there is any of it left, for it has lost none of its value, but has gained. It is now possible to see the curious spectacle of a *duplication of prices;* henceforth each commodity has two prices, one payable in metallic money, the other in paper money, and the difference between the two exactly measures the depreciation of the latter. Thus in Russia an article which is sold for eight roubles in paper needs only five or six roubles in silver, for paper there is depreciated to the extent of 25 or 30 per cent.

As soon, therefore, as a government perceives the premonitory signs, viz. a premium on gold or a rise in the rate of exchange, its first duty is to absolutely forbid any new issuing of paper money, for it has reached the point at which it must stop. If it has unfortunately overstepped that limit, and first beholds the appearance of the ominous symptom of duplication of prices, it must endeavor to retrace its steps and destroy all the paper money as it returns to the treasury, until it has been reduced to the due proportions. But such a heroic remedy, which involves the partial suppression of the national revenue, is not within the power of all governments. They cannot employ it unless they are in a position to do without a portion of their revenue, that is to say, they must have a surplus on their budgets.

IV. How even Paper Money may be dispensed with.

Though paper money has the effect of economizing metallic money, still, that advantage, as we have seen, is only obtained at the price of serious disadvantages and even great dangers. If, then, it were possible to find some means of economizing metallic money, without having recourse to so dangerous an expedient, that, undoubtedly, would be highly beneficial.

Now, such a means does exist, and it is both far more radical and far less harmful. It simply consists, not at all in replacing one costly instrument of exchange by another which costs nothing, but *in doing away with every instrument of exchange*. The working of this mechanism may be explained in the following way.

Firstly, sales for cash on delivery — *i.e.* the exchange of commodities for money — are replaced by *sales for cash at a future date;* that is to say, by the exchange of a commodity for a promise to pay, for it comes to nothing else. I deliver you my commodity, and receive in exchange a promise to pay, represented by a note or by a bill of exchange. (For the understanding of this chapter the reader should refer to the chapter on *Credit.*)

Secondly, once that these promises to pay have been made, we seek to satisfy them in some other way than by actual payment, *i.e.* than by the remittance of money in specie. Indeed, legal science affords us several means of attaining this end; *e.g.* by *compensatio,* in virtue of which two promises to pay are extinguished when two parties are mutually creditor and debtor, one to the other; or by *confusio,* when one party is at one and the same time creditor and debtor; or by *novatio,* when one promise to pay is extinguished by the making of a new promise.

The extreme complexity of social relations and the fact that each one of us, at any rate each producer, is in turn both buyer and seller, render far easier than could be imagined at the first glance, the employment of these different ways of extinguishing credit.

It was in international trade, in exchange between country and country, that men first learned to turn to credit and to dispense

with money. The difficulty and the dangers of carrying large quantities of specie for great distances inspired, perhaps the Lombards, or all and sundry, with the notion of the bill of exchange. Let us see how this result is reached in the practical working of actual business.

Let us suppose that French merchants have sold to England wine to the value of £4,000,000. They have sold it for cash at a future date; *i.e.* instead of receiving the value in specie, they have drawn bills of exchange to the value of £4,000,000 upon their English debtors. Let us suppose, too, that English coal companies have, for their part, sold coal to the value of £4,000,000 to French manufacturers, and have drawn bills of exchange of equal value payable on France. When the French manufacturers wish to settle for their purchases, will they send over £4,000,000 in specie? Certainly not; they will merely transfer to the wine-sellers the £4,000,000 worth of bills payable in England. They will not find them difficult to obtain; for, as we shall see, there is a certain class, called bankers, whose very business it is to trade in bills of exchange, *i.e.* to seek for paper payable abroad in order to hand it over to those who need it. The French manufacturers will then send over to their creditors, the coal companies, not the £4,000,000 in specie, but the corresponding value in bills, saying, "obtain payment from your fellow-countrymen." They will do so; and thus the absurdity will be avoided of sending two streams of cash across the Channel, in opposite directions.

Our instance, it is true, supposes that there are two countries which are reciprocally debtor and creditor one to the other for a precisely equal sum — a not very likely hypothesis. But if it did not actually exist, the same result can be arrived at, though in a roundabout way. Let us grant that France has bought £2,000,000 worth of tea from China, but has sold her nothing. Compensation, in such a case, appears to be impossible. Would it not then be necessary for France to send these £2,000,000 to China in specie? Perhaps not, after all. Though

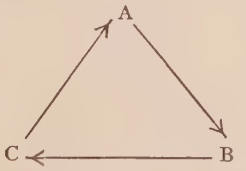
France has sold nothing to China, other countries in the world have, and are consequently her creditors. Then the French have nothing to do but to apply to these other countries, and obtain their bills. France is now herself a creditor of China, and nothing is more easy than to come to a balance with her. For example, it is possible that England has sold China £2,000,000 worth of opium; in that case France will have nothing to do but to obtain that bill (technically she has only to buy in London paper payable on Shanghai or Hong-Kong). But it will be said, in any case France will have to pay £2,000,000. What does it matter whether it be to England or to China? It matters a great deal; for it is only required that France herself should be England's creditor for £2,000,000 (say for wine she has sold her), and the transactions between the three countries will be thus settled without untying a purse string.

Without such ingenious combinations international trade would be totally impossible; for, if France had to pay in coin each year for one hundred and sixty thousand million pounds' worth of imports, where could she get this enormous quantity of money? She hardly possesses any more. In fact, the amount of coin which travels from country to country never represents more than a small fraction — 8 or 10 per cent at the most — of the value of the commodities exchanged.

In home trade, in the relations between private persons, we are far less advanced.

For the settlement of transactions between private persons, without having recourse to money, we can, in the first place, use the same system as between country and country; *i.e.* sell for cash at a future date, create bills of exchange, and pass them from hand to hand, till they are finally extinguished by *compensatio* or *confusio*. For example, I am a lawyer, and one of my clients, who is a wine-merchant, owes me a sum of money. Instead of paying me, he accepts a bill in my favor. When I wish to settle my account with my bookseller, I can hand him this bill in payment. If it happens that the bookseller gets his wine from the

same wine-merchant, he in his turn will only have to hand this bill in payment. Here is a fuller illustration: In the same town let there be three persons, whom we will call A, B, and C. Let us suppose that A is a creditor of B's, B a creditor to the same amount of C's, and C in his turn a creditor of A's. This is shown in the following diagram: —



Is it not clear that, instead of the sum of money owed by the three debtors respectively to their three creditors, having to pass through a complete circuit, it would be far simpler to settle the whole transaction without paying a farthing in cash? We may be told that it is highly improbable that C should be a creditor of A's, and should, as it were, be purposely placed where he is, in order to close the circle. No doubt it is improbable. But if C is not a creditor of A's, he will stand in that relation to D, E, F, G, H, etc., until we finally come to a man who in his turn is a creditor of A's, and then the problem is solved. The more persons there are in the operation, the better chance there will be of closing the circle.

But we can conceive an infinitely more convenient and simple plan. Let us suppose that all Frenchmen, without exception, have opened an account at one and the same bank, which has the duty of keeping for each of its clients all their receipts, by placing them to their credit, and to settle for them all their payments, by putting these to their debit.

By such an organization as this, we might dispense with the services of money, even to the last farthing. Every time I made a purchase, instead of paying the tradesman, I might confine myself to authorizing the bank to place the same to my debit and

to the tradesman's credit; the latter, in his turn, would do the same every time he made any purchases. If, instead of settling expenditure, I had to make an investment, it would be just the same; the bank would enter to my debit the sum representing the value of the stock, and an equal value to the credit of the company which issued it, or of the former holder who has transferred it to me. At the end of the year the bank would send each party his account, which would be closed (for the year) by a balance in favor either of the banker or the client. This balance would be carried forward for the next year, to the client's debit in the former, to his credit in the latter, case, and so forth. It is evident that, on this system, the sum total of all transactions could be theoretically settled by mere settlements on paper, by *transfers of items*, as they are called.

This hypothesis, by the way, is virtually realized in England, where all the English of the wealthy classes deal with a banker, whose very business it is to perform this double operation on their account. It is true that they have not all the same banker; but as all the prominent banks have a current account with the principal London banks, and as the latter, in their turn, have always an account open at the Bank of England, the situation is practically the same, though somewhat more complex.

In practice, the matter is done in the following manner: Every time that an Englishman has a payment to make to his tradesman, for example, he hands him a check, — that is to say, a bill on his banker. The tradesman does not take the trouble of going to cash the check, but sends it to his own banker. It comes to pass, then, that all the bankers in England are reciprocally debtors and creditors to one another for enormous sums. Their correspondents in London have only to communicate with one another and balance the accounts. They do this by meeting every day at the Clearing House, where they thus settle by means of simple *compensatio* transactions, which, of late years have amounted to the figure of £20,000,000 as a daily average, or more than £6,000,000,000 a year. The New York Clearing

House settles bills of still higher amounts, to the figure of about £10,000,000,000. For the settlement of the differences on these large operations, the use of metallic money is only needed in infinitesimal proportions.

V. How the Improvements in Exchange bring us back to Barter.

The evolution we have just followed affords a most singular spectacle. It is clear that its tendency is, by altogether doing away with the instrument of exchange, to bring us back to the direct exchange of commodity for commodity, — in fine, to barter. These ingenious and complex procedures, which stand for the latest dicta of economic progress, curiously resemble the primitive methods of still barbarous societies. It is not the first time that the historical development of the nations has displayed this singular course of the human mind, which first reaches the limit of its journey, and then appears to return almost to its point of departure, having thus described one of those huge circles by which the imagination of Vico was so powerfully impressed.

The present phenomenon is analogous to that which struck us when dealing with traders. We saw that social evolution first of all developed the class of traders whose function it was to facilitate the relations between producers and consumers; we then observed that this same evolution is nowadays tending to gradually eliminate this class of traders, and to return, by more simple and less costly methods, to the putting of producer and consumer into direct communication.

International trade, in fact, is now actually carried on by barter; for each country, to a greater or less extent, pays for its imports by its exports; in other words, exchanges its products for foreign products.

A kind of barter, too, would be returned to, on the hypothesis we have supposed, by which all the inhabitants of a country would

be clients of one and the same bank; for if no one had any further need of money, it would be because each man paid for the products or the services he might require by his own products or his own services.

Once more, a species of barter is virtually in operation at that wonderful institution, the Clearing House; for those huge bundles of checks, bills of exchange, and business papers, which are exchanged and set against each other day by day, are nothing but the symbols of piles of chests, of bales, of casks, which have been exchanged as material goods. Thus, by those who are behind the scenes, the Clearing House is viewed in the light of a colossal bazaar, analogous to those held at Kashgar or at Timbuctoo. The only difference is that it is not the goods themselves which are exchanged, but the warrants which stand for them.

VI. The Decadence of the Precious Metals.

If, as is scarcely doubtful, the methods just studied are propagated and spread over the whole world, a day may come when men will no longer have need of coin to use in exchange, and the precious metals will prove to have lost nearly all their value.

But will they not at least retain their value from the industrial point of view? That is not certain, for even in that quarter the high position they have held in the world might be gravely shaken. The more refined taste of the present day attaches little value to the costliness of the material, and only appreciates finish in form and perfection of workmanship. Luxury, whether private or public, no longer dreams of covering its monuments with gold, after the fashion of Solomon, who hung three hundred bucklers of gold from the walls of the temple; neither does it love to crowd its sideboards with massive gold and silver plate, as was the practice of our forefathers; nor is it the custom to bedizen garments with embroidery and gold lace, as was done by the courtiers of Francis I. on the field of the Cloth of Gold, and as is still done by Eastern women, who wear their dowries round their necks. No; it is the

cheapest materials — wood, terra-cotta, earthenware, copper, at the most, bronze — that, when once fashioned by an artist's hand, adorn our palaces and our dwellings; and as to dress, the latest decrees of fashion forbid men to wear jewelry set in gold.

Thus, from whatever point of view we may look, the metals called "precious" seem to be on the eve of losing the epithet which has always been bestowed on them. A strange history theirs has been, and it may in the future serve to astound our descendants. How long their reign has been, and to all appearance how firmly established! From being in the first rank of riches, they succeeded in becoming the very type of wealth — the only wealth that men coveted, the only wealth for which they contended. Alchemists, toiling over the *magnum opus* of the transmutation of metals into gold; emigrants, in the sixteenth century as in the nineteenth, streaming from their homes, to bring back from a fabled Eldorado a little of the coveted metal; negotiations, treaties, battles waged on land and sea by nations warring for their colonial or their mercantile systems, — in such callings and by such means have men striven and struggled to obtain these precious metals. But now the attributes which raised them to their exalted station seem to be dropping off, one by one, like the jewels from off a diadem. Supplanted as instruments of exchange by the improvements effected in commerce and in credit, despised as articles of luxury by the fashion of our day, it may be that, after having been so long the very type of wealth, gold and silver are destined to be one day erased from the catalogue of riches!

CHAPTER VI.

INTERNATIONAL TRADE.

I. Why Exaggerated Importance is attached to Foreign Trade.

Although international — that is to say, foreign — trade has attracted far more lively attention than home trade, still it is much less important. The foreign trade of France, even when including only the "general" branch of it, never exceeds £360,000,000 or £400,000,000 sterling, whereas the trade done at home, though much more difficult to calculate, cannot be less than £1,600,000,000 or £2,000,000,000. The term "general trade" applies to the movement of all goods that enter or leave France, whereas "special trade" refers only to the movement of those goods which have either been produced at home or are destined for home consumption. Thus the latter term comprises neither goods in transit nor goods for re-exportation. The total sum of the wealth produced in France cannot be reckoned at less than £800,000,000; but as each article passes through at least two or three different hands before reaching the consumer, the movement of the exchanges occasioned by this production must be valued at twice or three times that sum.

The proportion between foreign and home trade varies for each country, according to its position, its extent, and its own resources. We may even say that, in a general way, the proportion of the foreign tends to increase, inasmuch as the facility of communication better and better enables each country to secure foreign products from far off, and likewise to send its own products to distant lands.

Nevertheless, it still remains true that, for a great country, commerce with other countries plays only a moderate part in the general movements of its trade. In this point, the position of a country differs from that of individuals; in our modern societies, division of occupations has been pushed to its furthest limits, so that each of us, as already shown, scarcely produces anything at all save on behalf of his neighbors, and hardly consumes aught but what has been produced by his neighbors. Thus all he produces and all he consumes must undergo the operation of exchange. It is not the same when we deal with a country, especially a great country. If we wish to compare it with a private person, it should be likened to a landed proprietor residing on his own estate, who, himself producing the greater part of what he consumes, needs only buy from outside his land what he does not produce himself, and consuming, too, most of what he produces, needs only sell to others the surplus of his crops. This remark is not a needless one, for as we shall see, when studying the protectionist system, popular opinion tends to conceive a country in the shape of a trader, who does nothing but buy and sell.

II. Why International Trade always tends to take the Shape of Barter.

One more difference must be noted between international trade and exchange between individuals: the former is almost exclusively effected by means of barter, commodities being given for commodities, and money intervenes in very slight measure. If we take from the custom-house statistics the entries and goings of coin and bullion and compare them with the whole sum of exports and imports, we see that hard money scarcely ever stands for more than 7 or 8 per cent. The following are the French figures for the last three years, in millions of francs:—

Years.	Goods.	Coin and Bullion.
1887	7272	668
1888	7354	567
1889	8020	681

[Moreover, from the figures in the column relating to Coin and Bullion, we ought to deduct a quarter or a third, which is in the form of bullion, is destined for industrial purposes, and is thus a real commodity.] This circumstance is specially worthy of note; for, as we shall see when treating of the protectionist system, men are tempted to believe that a country, just like a private person, must pay in money for all it buys, and receive in money the total sum of all it sells. That is altogether incorrect; exchange between countries is effected like exchange between savages,—one product for another, on the principle of *do ut des*, though, of course, all due reserve should be made for possible improvements in the methods employed.

The following are the reasons for this apparently singular circumstance:—

First of all, had international exchanges to be settled by specie, an amount of coin would be required which would be out of all proportions to that at the disposal of any particular country. England has in circulation not more than £120,000,000 or £160,000,000, and this she absolutely needs for her home circulation; how, then, could she face an importation which yearly reaches something like the figure of £400,000,000? Even France, which of all the countries in the world is the best provided with money (we know that it is reckoned to be about £320,000,000), would be sorely pressed to settle in money all her foreign purchases, which usually exceed £160,000,000 a year.

Further, even were we to admit that, by a most improbable combination of circumstances, a country could succeed in always giving money and in always receiving it, in any case such an abnormal position could not be maintained for long. The very force of circumstances would speedily overturn it, only to replace it by a diametrically opposite position.

Let us suppose that France always demands and receives money in exchange for her exported goods. On this hypothesis, she would have to receive, in round numbers, from abroad about £120,000,000 each year. In less than three years, then, the

amount of money in circulation in France would be doubled, and in ten years quadrupled. Then the prices of all articles would also be doubled or quadrupled. On the other hand, in foreign countries, which would be robbed of their money for the benefit of the French, prices would constantly fall. Now, on such conditions, it may be taken as certain that the current of exportation would speedily stop; for we rarely see commodities go from places where they are dear to where they are cheap, any more than we behold rivers flowing back to their sources. Therefore a counter-current of irresistible force will be set up, which will bear foreign goods into France. For whilst the rise in prices in France will compel foreigners to discontinue their purchases, that very rise in prices, coinciding with the fall in prices abroad, will induce many Frenchmen to make their purchases in other countries.

Again, the currency of a country has not usually circulating power in other countries; it must therefore be reminted. In any case, it must be transported, and consequently must be insured against risk. All this means difficulties and expenses which will doubtless tend to diminish in consequence of the facilities of communication, but none the less they are difficulties and expenses.

Thus it was that several centuries ago business men, and in particular the races who possessed the true commercial genius, namely the Jews and the Lombards, taxed their ingenuity to discover means of settling the exchanges between different countries without sending coin; and they invented admirable instruments of credit which perfectly fulfil the desired conditions.

Thus every time that a country sends goods abroad, it must expect to receive in return from abroad goods of an equal value; and if by prohibitive measures it renders this payment in kind impossible, it must look forward to the current of its exportations being dried up in consequence of those very measures. We may therefore formulate this general law of international trade, "every exportation, when it takes the shape of a regular current, necessarily provokes and determines a corresponding importation."

But the converse of the law equally holds good: *every importation*, too, provided that it be repeated and regular, *provokes and determines a corresponding exportation.* In fact, a purchasing country cannot always pay in money (unless it produces one of these precious metals in its own mines, in which case that precious metal becomes an article to export, just like any other commodity). From the moment that it has no more money, it will be obliged, if the importation still continues, to pay for it in goods; however, long before that moment has been reached, the fall in prices would have stopped purchases made abroad by its subjects and would have induced foreigners to come and buy from it. It is the same reasoning as above, with the parts reversed. The current of money, then, will never persist in flowing in the same direction; like a tide of the sea it will sooner or later turn, and after having borne money away, will change and bring it back.

To reverse the current, a variation in prices will not always be necessary; a mere variation in the rate of exchange, which generally passes entirely unperceived by the public, will usually be sufficient to induce the turn. (See below, "The Rate of Exchange.")

Every-day experience confirms this law. A country has never been despoiled of its money by the working of its international trade, whereas many have suffered thus from the working of Gresham's Law. On the other hand, each time that a treaty of commerce or any other cause has considerably increased a country's imports, its exports have never failed to increase in like proportions. Thus when in 1860 France threw open her ports to foreign products, her imports rose from 2,521,000,000 francs (the average of the five years 1855–1860) to 3,231,000,000 (the average of the five years 1861–1865); but her exports likewise rose in equal proportion, between the one period and the other, from 2,813,000,000 to 3,449,000,000. Thus the increase in imports was 23 per cent, in exports, 28 per cent.

III. What is meant by the Balance of Trade.

Since all international trade tends to take the shape of barter, we seem to be justified in drawing the conclusion that in the trade of any country exports and imports should almost exactly balance. Such, however, is not the case; if we study the statistics of exports and imports, which in nearly all countries are drawn up with sufficient accuracy, we see that this equality scarcely ever exists. The balance of trade (that is the orthodox phrase) leans sometimes to the side of imports and sometimes to that of exports, the former being the most frequent.

Let us take France as an example. Here are the figures of her trade (*special* trade)[1] for the last five years, in millions of francs.

Years.	Imports.	Exports.
1885	4088	3088
1886	4208	3249
1887	4026	3246
1888	4107	3247
1889	4316	3704
Totals	20745	16534

The above figures show that during a period of only five years France bought from abroad 4,000,000,000 francs' worth of goods more than she sold; in other words, the annual excess of imports over exports was more than 800,000,000 francs (£32,000,000 sterling).

Does this contradict the law we have just laid down? Is France obliged to pay out £32,000,000 of money or so every year? That is not probable, for the most superficial observation shows that the quantity of money in circulation does not appear to have appreciably diminished. Nay, more; it has increased. For the custom house, besides registering the exports and imports of goods, also enters the comings and goings of the precious metals. No doubt these custom-house records are not perfectly accurate,

[1] *i.e.* not including re-exported imports, but only imports retained for home consumption. — J. B.

for they do not reckon, for instance, the money which travellers carry on their persons. But as the omissions must be practically the same for comings and goings, the relation between the two columns should not be sensibly altered.

Here are the figures relating to the precious metals, for the same period of years, in millions of francs: —

Years.	Comings.	Goings.
1885	479	339
1886	445	333
1887	271	397
1888	266	301
1889	448	233
Totals	1909	1603

Thus, during the same period, the metallic stock of France has increased by 300,000,000 of francs — an average of 60,000,000 francs a year.

Were we to take England, the figures would be still more surprising. The annual excess of imports over exports reaches, on an average, the sum of £160,000,000; in other words, one year would be enough to drain England of her money, down to the last penny, for her cash does not exceed that figure. But such does not occur. On the contrary, just as in France, the comings of money usually exceed the goings.

What, then, is the key to the enigma? Only this: To tell whether the foreign trade of a country is in equilibrium, we must not only consider the balance of its imports and exports, as we supposed in the preceding chapter, but we must study the *balance of what is due to it and due by it.* The balance of accounts now will not be the same as the balance of trade, for though exportation is one way and the chief way of putting the foreigner in our debt, still there are others. Similarly, though imports constitute a debt which the country owes to foreigners, it is not the only one. What, then, are these international claims or debts, which are distinct from exports and imports? There are many of them, but three stand out prominently.

Firstly, the cost of transport of exported goods; that is to say, freight and insurance. If the exporting country itself carries its own goods, it then holds a claim on other countries, which certainly will not be counted among the exports, for it only arises after the commodity has left the home port, and is on the way to its destination. Under this head a country like England has an enormous claim on other countries, which is reckoned to amount to £48,000,000 sterling;[1] for not only does she carry all her own goods, but she also carries the greatest part of the goods of other countries, and naturally does not do this for nothing. France, on the other hand, incurs a debt under this head, for in her own ships she scarcely carries more than half her exports and a third of her imports.

This excess which the cost of carriage places on the value of goods explains the following fact, which at first sight appears to be inexplicable. If we sum up the total of the exports and of the imports of all the countries of the world, we find a considerable excess of imports over exports. Thus, during the last few years, the total value of the imports of the world is reckoned to be £1,720,000,000 or £1,760,000,000 sterling, whereas the total value of exports would not exceed £1,520,000,000 or £1,560,000,000. Now if, instead of comparing the values of the entering and leaving goods, we compared their *quantities*, it is clear that the two amounts would be equal; for obviously, through the length and breadth of the world, there could not be more imported than exported goods, unless, forsooth, they bred on the way. As, on the contrary, there are some that are left on the journey, in consequence of shipwrecks, it is clear that the goods which arrive should be of slightly smaller amount than those which are sent. But as, instead of considering quantities, we consider values, and as these values are heightened on the way, just because of the cost of conveyance, it is not surprising that the imported goods,

[1] Sir T. H. Farrer says £50,000,000 (*Free Trade* versus *Fair Trade*, 4th edition, 1887, l. 7 of p. 122). These, as Mr. Giffen says, are the "invisible exports." — J. B.

that is to say, those that reach their destination, stand for a higher value than the exported goods, that is to say, those reckoned from their starting points.

Secondly, the interest on capital invested abroad. Rich countries invest abroad a large part of their savings, and for this reason draw from abroad annually very considerable sums in the shape of stock coupons, shares, and debentures, or even in the form of farm rents or profits on industrial or commercial undertakings. £80,000,000 sterling is reckoned to be the amount of the tribute that England levies under this head from foreign countries or from her own colonies. Not only have India and the Australian colonies negotiated almost the sum total of their loans on the London Exchange, but how innumerable are the businesses that Englishmen direct or command all over the world! In the United States they are said to have acquired lands whose area is estimated to be 20,000,000 acres, — the area of Ireland. France, too, has considerable claims abroad, chiefly in Europe. The interest accruing from them cannot be much less than £40,000,000 a year.

Spain, Turkey, India, Egypt, the South American Republics, on the other hand, figure as debtors under this item. But it should be observed that when these countries issue a loan, and so long as this loan is not fully subscribed, they become for the time creditors of the countries who are sending them funds.

Thirdly, the expenses incurred by foreigners living in the particular country. As the money spent by these strangers is not the product of their labor, but is drawn from their estates or from capital invested in their native land, all countries which are resorted to by wealthy foreigners receive a constant current of claims. In this respect France, Italy, Switzerland, Algeria, are creditors for considerable amounts of England, Russia, and the United States. Let there be in Paris a floating population of 50,000 foreigners, spending only a pound a day; to pay their expenses they must draw from the country of their origin an annual sum of £18,250,000. It is like a bill for their boarding expenses. (See

farther on, "The Expenditure of Foreigners.") In all France there are reckoned to be more than 1,100,000 foreigners, but naturally an enormous majority of them come only to gain money, not to live on their incomes. It is only the latter that we are now speaking of.

Some other kinds of claims and debts might still be mentioned; for example: —

Firstly, bankers' commissions, when they extend their operations abroad. Exchanges, like that of London, and even the Paris Bourse, receive orders and execute operations for all countries. As this is not done gratuitously, they are creditors under this head for considerable sums.

Secondly, the sale of vessels. Ships bought do not figure on the custom-house books, either as exports or imports. Now England, who builds ships for the whole world, in this item, too, is a creditor for a rather large amount, and so the sum due to France, also, though much smaller, is by no means to be neglected.

Still we must be careful not to reckon in these claims the *profits* of exporters. For these profits are already included in the value of the exports, since this value is fixed by a commission called the commission on values, according to the selling prices entered on the invoices.

The three classes first referred to are the principal claims. They are enough to restore the balance and to explain our enigma of a page or two back. Take the case of France: if we enter to her credit in the first place £120,000,000 of exports, then £40,000,000 interest on capital invested abroad, and lastly £18,000,000 of expenses incurred by foreigners; and if we enter to her debit, firstly, £160,000,000 of imports, and then a few score of millions for the transport of the portion of these goods that sail under a foreign flag, we shall see that the desired equilibrium is virtually found and that there is even a slight balance to France's credit. The same calculation could be gone through in the case of England.

The foreign trade of a country, then, is in equilibrium, not

precisely when there is equality between its exports and its imports, for that never happens, but when there is equality between its claims and its debts.[1]

If this equilibrium is disturbed, it tends to be restored through the working of that law we studied in the preceding chapter. Just as we declared that every new exportation of goods induced a countercurrent of imports, so too, we must say that "every new claim on a foreign country tends to cause importation from that country." Again, just as each regular importation causes a corresponding flow of exports, so, too, "every debt contracted with a foreign country tends to cause a flow of exports into that country."

The reasons for these phenomena — to wit, variations in prices or merely in the rate of exchange — are absolutely identical with those which tend to reverse the proportion between exports and imports.

IV. Wherein lie the Advantages of International Trade.

In international just as in all other exchange an equal value is given for an equal value. Where, then, is the advantage of exchange? The advantage is exactly that which we pointed out when studying exchange between individuals. Why, indeed, should it be different? for it rests merely in an economy of labor.

Let us suppose that in France the production of a hundred weight of corn requires six days' labor, whilst in America it requires only three; in that case, France, instead of directly producing her own corn, will find it to her advantage to obtain for herself American corn, by giving in exchange an equivalent value, that is to say, an article which will have cost her, too, only three days' labor; in this manner, she will economize three days' labor for every hundredweight imported. In other words, she will obtain the same satisfaction as previously for half the effort. In this, as we have already seen, lies the essential advantage of

[1] The various items in the reckoning are given in Mr. Goschen's book on *The Foreign Exchanges* (first published in 1861).— J. B.

all exchange. It is not otherwise with international trade or exchange.

Now, this advantage arising from international trade does not necessarily imply any inferiority in production of the importing country, though that is most usually the case. It may be to a country's interests to obtain certain goods by importation, *even though it may be capable of producing them under more favorable conditions than other countries can.* This, at first sight, appears to be a singular circumstance; yet it occurs frequently enough. Let us suppose that the Antilles could produce corn under more favorable conditions than France can, — say a hundredweight in three days instead of six, — would it not seem to be to their clear advantage to produce their corn directly, and that it would be foolish to import it from France? Yet it is very possible that the Antilles profit by the transaction. That would occur if we were only to suppose that they are able to pay for the corn they obtain from France by a product they can produce under still more favorable conditions than they can corn, — say by sugar, which will cost only *one* day's labor. This transaction will evidently be extremely advantageous to them, for it will give them the same quantity of corn for a third of the labor.

A country, then, might be superior to its neighbors on all points, and yet find it to its interest to import their products. Even in that case, it would find it best to devote itself to the production of articles in which its superiority is the most marked, and to offer them to its less favored neighbors, so as to obtain in exchange products in which its superiority, though actual enough, is less clearly marked.

It is obvious that the advantages just referred to may well enough be reciprocal, and indeed ought to be so, other things being equal. For in every exchange, each party only agrees to the exchange in so far as he knows or believes that he will obtain some advantage in so doing, *i.e.* that he will either be saved a certain amount of labor, or will obtain an article which is useful to him in exchange for one which is relatively useless. But though

we can hold it for certain that each party reaps some advantage from the change, we are by no means justified in affirming that the respective advantage gained on each side is equal; that is scarcely probable.

No one would dream of denying the above advantages, were international trade seen by all eyes in its true light; that is to say, as barter, commodity for commodity. No one, then, would hesitate in agreeing that it is in importation rather than in exportation, in the article received rather than in the article yielded up, that the real advantage of international trade must be sought. For in the exchange of objects in their actual physical state, does not each party consider the object to be acquired as the real aim of the operation, and the object given up as a mere means of acquiring?

Unfortunately, to the vulgar eye international trade is not seen in its true shape of barter; people only see sales made abroad on the one hand, and purchases made abroad on the other hand, and never dream of establishing any inevitable connection between the two classes of transactions. From this blindness arise most of the difficulties that beset this question.

V. Why the Advantages of International Trade should be measured neither by the Excess in Imports nor by the Excess in Exports.

Such being the advantages of international trade, we must beware of the common error of desiring to measure the profits of international trade, either by the excess of exports over imports, which is the protectionist theory, or by the excess of imports over exports, which is the free-trade theory. Both these ways of valuing the advantages of international trade rest alike on an analogy which we have shown to be inaccurate, namely, the likening of the position of a great country to that of a business man.

According to the first theory, here is a London merchant who buys tea in China, to sell it again in France; the tea he imports

is valued at £4000; the same tea, when exported, is valued at £6000. His profits, then, are measured by the excess of the selling price over the cost price, therefore by the superiority of exportation to importation.

According to the second theory, here is a London merchant who sends to the Gold Coast a general cargo of goods, which are worth £4000. These he exchanges there for a cargo of ivory and gold dust, which on reaching London is worth £20,000; his profits are measured by the excess in value of the imported over the exported goods; therefore by the superiority of importation to exportation.

Both of these conclusions are based on the particular circumstances to which they apply, and are alike false when an attempt is made to generalize them and to extend them to the whole trade of a country. For a great country is not a trader; it has other functions besides buying to sell again, or selling to buy again. No doubt these various operations might be sources of profit for certain classes of business men and consequently for the nations of which they form a portion; and they have been practised on a large scale by Tyre and Carthage in old days, by the Hanse towns and the Netherland cities in the Middle Ages, and by England in our own day. But for a great country viewed as a whole, the object of trade is not to make money, but to satisfy those of its wants that it cannot satisfy directly. If it is to be compared with a private person, it should be likened, as we have shown, to a landowner, who does not buy to sell again or sell to buy again, but who buys what he needs for consumption, and sells his surplus stock.

If we take the case of France, the fact that her purchases amount to about £160,000,000, while what she sells scarcely reach the figure of £120,000,000, by no means justifies us in concluding that she has gained this difference of £40,000,000, nor less still that she has lost it. Similarly, when we see the United States exporting yearly £28,000,000 or £30,000,000 worth of goods more than they import, we must not conclude that

they have gained this sum, far less that they have lost it. In reality, as we have seen above, in exchange for these £160,000,000 worth of goods France has given £120,000,000 worth of goods, besides another £40,000,000 represented by bills that she holds abroad. Thus she has given equal value for equal value; in the drawing of the balance-sheet of these transactions we must not attempt to find either a loss or a gain that can be valued in figures, but we must look to the far more important economic advantages which we have referred to in the preceding section.

What an extraordinary idea it is to measure the benefits of exchange and of trade, whether between countries or between private persons, by the profits of business men! People fail to observe that the profits business men draw from these transactions are, in fact, a charge both for producers and for consumers, a legitimate charge when it corresponds to a service rendered, but which, nevertheless, must be *deducted* from the advantages of exchange. Did business men make no profits at all, exchange would be none the less beneficial; nay, it would be even more so. No doubt, under present circumstances such a state of things would be impossible, but that is quite another question. As Cairnes has admirably said, "It would be just as reasonable to represent the advantages of learning as measured by the salaries of teachers." — *Leading Principles*, III, v, page 502.

VI. How it happens that International Trade necessarily harms Certain Interests.

It must not be inferred from the above discussion that international trade is beneficial to every one. That would be to misunderstand its effects. It follows, indeed, from our explanation of the effects of international trade that the aim and result of this method of exchange are to economize a certain amount of labor. But given our present societies which are based on division of labor, and it will be seen that a certain quantity of labor cannot be economized *without rendering useless a certain class of laborers*

(see below, "The Disadvantages necessarily involved in All Progress in Production"). The China trade is an advantage for French consumers and for the country in general, since it enables them to obtain silks at a smaller cost and for less labor, but the mulberry-tree growers and silk spinners of the Cevennes, who used to earn their livelihood by this industry, are to some extent becoming expropriated.

It is true enough, as we showed in a recent section, that every new importation induces a corresponding counter-current of exportation, and that Chinese silk, for example, will be paid for with Parisian articles, which must be produced for that purpose. But we must not forget that silks imported from China obviously stand for a lower value than the French silks, which they have replaced as articles of consumption; were not that the case, they could not have supplanted them in the market. Say that the value of China silk imported is only £1,000,000, whilst the products of French silk-worm culture were at least £1,600,000. To balance this flow of imports by an equivalent counter-current of exports, it will be enough for Parisian industry to send to China £1,000,000 worth of Parisian articles. The final result, therefore, is a diminution of home production by £600,000, and a corresponding diminution in labor.

Were no other effect produced than a displacement of labor, for that is obvious, none the less, grave injury would be done to certain classes of the people. For the silk manufacturers of the Cevennes, being unable to turn their spinning-mills into manufactories of Paris goods, will have to lose all the capital they have sunk in their works; and as the spinners whom they employ will be equally unable to go and make knick-knacks for the Chinese, it is not certain whether they will find another trade. Thus the employers are ruined, the employed are thrown out of work and plunged into poverty.

A few attenuating circumstances can be set on the other side. We may say that international trade, just as machinery, will be able, by its indirect consequences, to increase the amount of labor which it had begun by diminishing. This will be effected in two different ways.

Firstly. Because the lowering of prices resulting in Free Trade will bring along with it an increase in consumption, and consequently an increase in production. Thus the fall in the price of silks will increase the consumption of them. Even admitting that this increased demand will affect only Chinese, and not French, silks, nevertheless, to pay for this larger bulk of imports, there must be a corresponding increase in the amount of exported Paris goods, the value of which will be not merely £1,000,000, as in the previous case, but perhaps even £1,600,000 (the value of the French silk industry).

Secondly. Because the lowering of prices, by diminishing the expenditure of consumers of any particular article, may enable them to lay out the resulting saving in other expenditure, or perhaps to invest it. Consequently all that is taken away from labor by one road may, by another road, in the shape of savings or new expenditure, go to feed other branches of industry; and it is possible that in the long run the national labor may not have been diminished at all.

THE QUESTION OF FREE TRADE AND PROTECTION.

I. Why the Question of Free Trade *is* a Question.

There is no subject in political economy, hardly, perhaps, in any sphere, which has stirred up more controversies, caused the writing of more volumes, nay, even occasioned the firing of more cannon-balls, than the question of international trade.

But why? Is not the trade between country and country similar on all points to trade between individual and individual? Is it not, like private trade, an ordinary and normal form of exchange? What, then, is the use of a special theory for international trade? If exchange is in itself a good thing, how comes it that it may present certain dangers in consequence of the wholly extrinsic circumstance that the two exchangers are separated one from the other by the flag-post that marks a frontier?

That is how political economy regards the matter. It does not admit and does not understand that international trade can be subject to other rules than those which rule each particular branch of trade. For political economy the celebrated question enunciated above is not a question at all, and ought to be struck out from the list of our subjects of study. Exchange is a form of that division of labor, the wonderful effects of which we have already explained, and its utility is absolutely independent of the circumstance whether the exchangers belong to the same country or to different countries. Political economy was still in its first youth, under the fostering care of the physiocrats and of Adam Smith, when it uttered the formula, "*Laissez faire, laissez passer*"; that is to say, its first cry was a free-trade declaration. And since then, in spite of a few hesitations, and even some expressions of dissent, it may be said to have remained faithful to its old motto.

But political economy has not succeeded in convincing either legislators or peoples. At one time (about thirty years ago) its cause appeared to have been won. England had then adopted free-trade opinions, and France, following her lead, had drawn successively into the same path nearly all the European nations. But that conversion, which seemed to be a final one, was of but short duration. The reaction was as sudden as it was violent, and at the present day, of all the countries of the civilized world, there are only two, England and Belgium, which have remained faithful to Free Trade.[1]

This question, in truth, is of old standing; yet it was scarcely till the seventeenth century that controversies over it began to rage. It is obvious that certain conditions were requisite to produce its origin which could not be fulfilled till modern times.

Firstly. The first requisite was the rise of great States, which, by the extent of their territory and the bulk of their population, were able to produce all that they needed, in fact, which became self-sufficient. Merchant cities, such as Tyre and Carthage, Venice,

[1] Switzerland and Holland might be added. — J. B.

or the Hanse towns, or the cities of the Netherlands, could lay claim to no such ability.

Secondly. The other determining condition was a sufficient development of the means of transport for competition to become a matter of danger, in the production of articles of large consumption, such as agricultural products. When trade merely carried in caravans or in small galleys articles of luxury, such as Tyrian purple, Venetian brocades, Toledo blades, there was no reason to think about protecting national industries. But it is clear that such a question might become one of urgency, as soon as, from one end of the earth to the other, trade carried whole mountains of corn, flocks of sheep, shiploads of cotton stuff and of cloth to feed and clothe a whole people.

An account of the history of the protectionist system would be out of place in this book; here we need only call to mind the most memorable dates.

It was in the year 1846 that free trade was adopted in England by the abolition of the Corn Laws, after the heroic campaign led by Cobden. In 1860 Napoleon III inaugurated the same policy in France, by the famous Treaties of Commerce with England. From that date it looked as if free-trade doctrines were destined to triumph all over the world. But the United States, in 1867, after the conclusion of the Civil War, and Germany, in 1879, under the influence of Prince Bismarck, adopted exceedingly protectionist laws, and other countries, in their turn, executed a right-about-face movement. In 1881 France reconstructed her general customs tariff on a more restrictive basis; in 1882 she refused to renew her treaties of commerce with England; in 1887 she burdened foreign corn with a duty, first of half-a-crown, and then of four shillings on every two hundredweight. In 1891 she is about to abandon all the commercial treaties which unite her to the rest of the world.

It is not difficult to discover the reason for this opposition between theory and practice. No one denies that Free Trade is the system that is preferable from the theoretical point of view,

or that it is the best suited to the general good of mankind. But nations and their rulers are not in the habit of speculating on the general interests of the human race; they only busy themselves with the particular interests of the country in which they live, and surely they cannot be reproached with criminality for doing so. Now they judge, whether rightly or wrongly, — the whole question rests on that, — that international trade, if left to itself, might tend to ruin the industry of a country, to restrict or even to stifle its productive powers, and even indirectly endanger the very national existence.

Take, for instance, the importation of corn from America, which no longer allows French cultivators to grow corn at any profit. It may be the same with butcher's meat, with wine, with wool, with silk. Is it necessary, then, that these agriculturists, who form one-half of the whole population of France, should abandon the land, to swarm into the towns? What dangers may not be incurred by the country in consequence of such a displacement of labor, — danger not only economically, but from the point of view of public health, of morality, of political stability, of military strength, of the future of the country! Moreover, who can assure us that those portions of the populace, when once driven out of the country districts, will find more remunerative labor in the towns. Is it not possible that the manufacturing industry may, in its turn, sink under the weight of foreign importation? If a country is unfortunate enough to be inferior to certain foreign countries in all branches of production, it will be dislodged in succession from each of its positions, and but one resource will be left to it; namely, to transport its people and all its remaining capital into those very countries which wage against it the victorious competition, in order to benefit there, at least, from the conditions which bring about that superiority. If France can no longer sustain the competition of America, she must transplant herself to America!

Such, men say, is the logical consequence of a system which regards international trade merely as the fittest mode of organization for reaping the most possible from the earth and the men

that people it, without troubling themselves at the fact that these men are divided into nations, and that each one of these nations has the right and the will to live.

It is true, they add, that competition within the country itself and home trade may produce the same effects in their spheres. It is possible that the liberty and the facility of communication between the department of the Cantal and Paris may involve the depopulation and the industrial death of that department; but in this case one portion of France gains what another part loses; there is no reason for interference with that. But, if the liberty and facility of communication between America and France, by a like law, involve the depopulation and the industrial death of France, then there is reason to interfere; and that not only in the interests of the country, but also in the higher interests of civilization. For, after all, nations have another part to play on the world's stage besides that of mere economic producers, and cheapness should not be the only sufficient reason for their existence.

II. The Protectionist System.

The foregoing is an exposition of the dangers to be feared; what is the practical conclusion? Are we altogether to do away with international trade? That, indeed, might be thought to be the logical conclusion of the train of reasoning set forth above. But no; nothing of the sort; protectionists are not in the least enemies to international trade. At any rate, that is their boast; and they prove the truth of this claim by the efforts they make in discussing it among themselves, and, if need be, by the sacrifices they consent to bear for the purpose of binding together the various countries of the world by a network of railroads or by great maritime routes. The only thing is, that they regard international trade as a state of war, as one of the forms of the struggle for existence among nations. At any rate, that is the aspect which matters assume in our days. But Montesquieu had not foreseen such a situation when he wrote, "The natural effect of trade is conducive to peace." — *Esprit des Lois*, XX, Chap. 2.

Now, just as the art of war consists in invading and occupying the enemy's territory without allowing one's own land to be invaded or occupied, so, too, the system of tactics of international trade ought to consist in inundating the enemy's territory with one's own exports without allowing foreign imports to enter one's own country. What is necessary, then, is to establish a national industry which shall be vigorous enough to be capable of repelling foreign products and also of competing victoriously against these foreign products on their own ground. Such is the problem which has been posited by Protection for several centuries, and the solution of which is attempted by means of a whole body of extremely complicated tactics.

We are not able to enter here into the details of this system, which has, indeed, varied a great deal in its main lines, but the following are its characteristic features.

As to exports, first of all, they should not only be approved of, but should be sought for and encouraged, if need be, by bounties. Thus Germany and several other countries grant bounties on exports of sugar. The colonial policy, which the various countries of Europe have been lately following with such mad zeal, had no other object but to open up new markets and consequently to favor exports.

Yet, by a contradiction which appears to be remarkable, the protective system formerly used to lay heavy duties on exports. These were justified by the intention of retaining in the country certain articles of wealth (such as raw material, corn, etc.), which seemed to be essential for production or for the food-supply of the country. Export duties are now no longer employed except for fiscal purposes, and are usually on articles which form a monopoly (*e.g.* guano in Peru, opium in India).

Exports, then, are alleged to possess nothing but advantages:

Firstly. Because they obtain for the country the profits which result from every act of sale made under normal conditions.

Secondly. Because they cause coin to enter the country, or at any rate, render the country a creditor of foreign lands, which is always a favorable position.

Thirdly. Because they extend over the world not only the commercial relations of the country, but also its political power and its moral influence. To sell to foreign countries, is to make clients or dependents of them, not only literally, but figuratively.

Imports, on the other hand, present numerous dangers. First of all, in a general manner, since they are the opposite of exports, which are beneficent, they must be harmful.

Firstly. Because instead of enabling us to make a profit from dealings with foreigners, they allow foreign countries to profit at our expense.

Secondly. Because instead of making coin come in, they make it go out.

Thirdly. Because instead of turning foreigners into our customers, they make us the clients of foreigners.

Fourthly. Above all, because they compete with national industries.

It is necessary, then, if not to reject imports altogether, at least only to admit them knowingly (Cato the Elder long ago gave the same advice to landowners in his work *De Agricultura*, "patrem-familias vendacem, non emacem esse oportet." That might be taken as the motto of protectionists, and thus the protective system has been led to draw a goodly number of distinctions).

As regards the importation of *exotic* products, which have no equivalents in the receiving country, because, for one reason or other, it is unable to produce them (for example, coffee or chocolate in France, tea or wine in England), protectionists would see no difficulty in their free admission. But unfortunately, as financiers regard them as excellent taxable matter, these products do not gain much from this kindness of the protectionists. Thus England, which is altogether free trading, levies enormous duties on these products — tea, sugar, coffee, tobacco, and wines — which are valued at no less than £20,000,000; but these duties are purely in the interests of the exchequer.

When duties have this fiscal character, it is to the interest of the

government to lower them as far as possible, in order to develop the importation of taxable products. Experience shows that for this, as for all other taxes, postage duties included, the import usually yields an increased return in proportion to its lightness. But when duties have a protective character, the wished-for aim is a decisive reason for their being raised to as high a figure as possible.

As for raw material, and even for food-stuffs, men of former days (for instance, in the system of List) were inclined to admit them free. But now that progress and the cheapness of transport have wonderfully facilitated the entrance of raw material and agricultural produce, the producers of both, who are usually agriculturists, have asked, not without reason, why they, too, are not protected. As a matter of fact, duties on food-stuffs (corn, cattle, wine, etc.) have become the rule in all protectionist countries, and the logic of events will not be long in laying them also on all raw material.

Still, when we come to deal with imports which are necessary to feed our exports, they must be admitted freely, if we are desirous of extending our export trade. This has been done in the form of *goods for re-exportation;* that is to say, free entry is granted to certain raw materials, such as iron, corn, etc., only on the condition that this material shall be re-exported in the shape of a manufactured article, such as machinery, flour, and so forth, within a specified time. The producer who imports his raw materials has to give security that he will re-export them in a fixed period, hence the name under which this system is known, — that of "conditional quittances." There is also another plan known under the name of a "drawback." It differs from the preceding in that the duties must be paid on entry, but are returned on leaving. Both of these systems, in consequence of various reasons, the details of which cannot be entered on here, are the cause of innumerable difficulties, and even of harm to the treasury.

Finally, as to the importation of *manufactured products*, there can be no possible hesitation, and the choice lies between pro-

hibition and duties on entry. These duties on importation are called *specific* when they are fixed only according to the weight or to the volume, *ad valorem* when they are fixed according to the value of the goods. The former of these systems is the more convenient, the latter is the more just.

The second method, that of import duties, is usually preferred, and even exclusively adopted, because, on the protectionist theory, it unites the following advantages: —

Firstly, of protecting the national industries in sufficient measure by graduating the duty according to the requirements.

Secondly, of obtaining for the State, under the shape of customs duties, of revenues which cost the country nothing, since they are paid by foreigners.

III. Whether the Dangers feared by the Protectionist Theory are Real.

Among the dangers dreaded by the protectionists many are certainly baseless, but still there are some actual dangers.

There is no reason to fear that imports will carry away all the country's coin, for observation, as well as reasoning, shows that this circumstance can never be brought except in an accidental and temporary manner.

There is no reason to fear that foreigners, by selling to us, will grow rich at our expense; for if we buy from them, that is assuredly because we find it economical to do so, and the part of buyer may be just as advantageous, though in a different way, as that of seller. The English and the Belgians, thanks to their freedom of importation, can buy their bread for 3*d*. or 4*d*. the quartern loaf, whereas the French pay 7*d*. or 8*d*. Thus there is a saving of a penny on each pound, which, multiplied by 38,000,000 of Frenchmen, consuming one pound per head each day, and for the 365 days of the year, would make an annual sum of £23,000,000, — a rather higher sum than the interest on the French national debt, which in 1887 was £35,000,000.

There is no reason to fear that we shall be driven to always import without ever exporting, for imports inevitably excite exports. Inversely, there is no reason to expect to be always able to export without ever importing, for exports necessarily cause imports. Besides, if in the process of international trade all countries were resolved to play exclusively the part of seller, and none of them agreed to play the part of buyer, how would trade be possible?

There is no reason to fear that imports, by making us the customers of foreigners, will put us into dependence on them, for it is not usually the case for customers to be dependent on their tradesmen. On the contrary, it is the tradesmen, rather, who seek to court the good graces of their customers.

Finally, there is no reason to fear that imports will entirely do away with the national labor, for people forget that every importation entails an exportation of equal value, and that consequently the national labor will recoup itself in one quarter for what it has lost in another. We need not then take as serious the appalling picture just set before us — that of a nation driven from its territory by foreign competition, and compelled to emigrate to a foreign land. Even admitting that a country might be unlucky enough to be inferior to its neighbors in all branches of production, none the less it would be obliged to produce, in order to pay for the foreign products it might wish to consume, unless we are to suppose that foreigners would be generous enough to supply the country gratuitously with all its necessaries, in which case its position would be a not unenviable one. And if a country did happen to be reduced to this situation of general inferiority, if it was really poorer than all other countries, if for the same or even a larger amount of labor it could only procure a smaller amount of satisfactions — well, it is certainly not prohibition of foreign products that could change such a situation in the least, or could prevent the inhabitants of that country from emigrating *en masse*, if ever misery gained the day over affection for one's native land.

On the contrary, the nations of Europe would be unable to obtain food, and therefore to keep at home their ever-increasing

population, unless they were to import from abroad larger and larger supplies. Even now, England, in order to sustain on her limited territory her daily increasing population, is obliged to derive from imports *more than half* of her consumption of cereals, meat, drink, etc. The home production of these articles was, in 1883, reckoned to be £169,140,000, and the importation of the same articles at £174,660,000 (Stephen Bourne, in the *Journal of the Statistical Society*, September, 1883).

To return to the dangers feared by protectionists.

It is true that free trade, precisely because it enables the same amount of satisfaction to be obtained with less labor, which is the characteristic feature of all progressive production, may diminish the demand for labor in the very proportion of the economy realized and the progress accomplished.

It is true that free trade almost always involves, especially at its beginning, great displacement of labor, which at certain points may cause the ruin of the capital sunk or the throwing out of work of the laborers employed, and these effects may take the shape of literal catastrophes.

It is true that a country may be fearful of seeing sink, under the weight of competition, some one industry which it judges to be essential to its security; such as the manufacture of arms, of powder, and even of locomotives, dockyards for the construction of war-ships, and even, in a certain measure, of merchant shipping, the breeding of horses, perhaps coal mines or iron fields; or the industries may be such as it considers to be useful for the satisfactory working of its social constitution, such as the agricultural industry in general, or certain domestic industries. It may fear, too, especially if it be a new country, of seeing growing industries nipped in the bud, which, if they had had time to develop, might have borne fine fruit.

In new countries, indeed, growing industries have to contend with great disadvantages. It is not easy for them to compete with industries of old standing, which are in possession of vast markets, and which, thanks to the extent of their production, can

push to their utmost the improvements of division of labor and of production on a large scale. The struggle is the more arduous, because, in new countries, wages are higher and laborers less experienced. We all know that it is not easy to grow young trees in the neighborhood of old ones; for, as the latter have already appropriated all the light of the heaven and all the sap of the soil, the younger trees have room to spread neither their roots nor their branches. Thus we understand well enough that the Australian colonies, who supply the whole world with wool, are desirous of turning it into cloth themselves, instead of sending it to England, to have it manufactured there, and then returned to them. In the same way, if the French colony of Algeria were to turn its alfa grass into paper on the spot, instead of exporting it in the raw state into England, or if Senegal could turn its arachides (ground-nuts) into oil, that would be a great gain, not only for themselves, but for the whole world; for there is no more sterile labor than that of transporting from one end of the earth to the other a dead weight and useless material; that is a true labor of Sisyphus, for every useless act of conveyance is an useless waste of labor.

Even if it were necessary for them to bear a certain sacrifice for some time, in order to put their manufactures into a state of stability, to enable them to take root and successfully compete with foreign manufactures, that, in our opinion, would be an expense well incurred, which one day would be repaid them with interest.

It must be confessed that this theory seems to be confirmed by the example of the United States, who, guarded by that rampart of protection that they had reared, have so brilliantly effected their economic evolution, and have become one of the chief manufacturing countries in the world. Would American industry have grown so quickly had it had, from its first beginnings, to struggle against English manufactures, and might it not have been nipped in the bud by its powerful rival? That is at least a question of debate.

It is also worthy of note that most of the English colonies,

nearly all the Australian colonies, Canada, and so forth, although reared in the traditions of free trade, have felt the necessity of having recourse to the protectionist system.

Within these limits the dangers pointed out by the protectionists are real, and within these limits we agree with them that the State has the right and the duty to guard against these dangers by the means that it judges to be best fitted to that end. The dogma of inadmissibility urged by the liberal school against every intervention of the State touches us little, not only because this principle has no absolute scientific value, but especially because the question here rests in the domain of politics rather than in that of economy. The point is to determine, not the best possible mode of commercial or industrial organization, but the best mode of preserving the industrial and commercial power of a particular country. We do not deny that the system of protection is a burden to the country which is obliged to resort to it, and that it entails considerable sacrifices; in that we fully agree with the free-traders; we only add that a country does not hesitate to lay on itself equal or even heavier sacrifices, when the question at issue is to preserve its political, military, maritime, or colonial supremacy. Why should it not do the same for the purpose of saving its industrial or commercial supremacy, for that is of at least equal importance both for its national existence and for its destiny?

IV. On the Disadvantages of Protective Duties.

If we can grant the essential idea of protectionism, viz. that the State has the right to protect in certain particular cases the industries that are useful to a country, still in our opinion the means employed for that end do not appear to be justified, although they have been hallowed by a practice of several centuries: we refer to the laying of import duties.

Numerous disadvantages are presented by this mode of procedure.

Firstly. It fails to achieve the proposed end, for it brings about an *unequal* protection, which is insufficient for the weak and useless for the strong. Take a duty of two shillings on the hundredweight of corn, which raises the price of corn from 8 to 10 shillings. The landowner who cultivates inferior land or who has but scanty resources, who produces merely ten hundredweight the acre, will only reap an increase in his income of 10 shillings, which probably will not be enough to cover his expenses; whereas the landowner who being already favored by nature or by improved methods, grows thirty hundredweight the acre, and consequently could very well do without any protection, will find that his income is increased by £3 the acre.

Secondly. It grievously shackles foreign trade, for by reducing the importation of goods *it reduces exports in the same proportion;* it is therefore in most flagrant opposition to the efforts that nations are making to facilitate communication, to pierce through mountains, to cut through isthmuses, to furrow the seas with lines of subsidized steamboats and telegraph cables, to open international exhibitions, to establish monetary conventions, and so forth.

Thirdly. It does the greatest harm to industrial production *by raising the cost of production*, either directly by the increased dearness of raw material, or indirectly by the increased dearness of manual labor. Hence spring permanent and insoluble conflicts between the various branches of production: if import duties are put on wools or silks to protect the producers of sheep or silkworm cocoons, there arise outcries for the silk-weavers and wool-spinners; if import duties are put on wool, silk, or cotton threads, the weaving industries are ruined. The complicated mechanism of the treatment of "goods for re-exportation" is an altogether inefficacious palliative.

Fourthly. It does still greater harm to the material production *by removing the stimulus of foreign competition.* In a political speech Prince Bismarck spoke of those pike that are put in carp-ponds to keep the carp active and to prevent them burying themselves in the mud. That simile is especially appropriate

here. If we desire — and that is the protectionist's desire — a country to maintain its position as a great industrial and commercial power, it must be compelled constantly to renew its tools and machinery and its methods of work, ceaselessly to eliminate worn-out or obsolete organs, just as the snake which renews its youth by casting its skin. As this operation is always a disagreeable one, it is doubtful whether producers would submit to it with a good grace, were they not obliged to do so by an exterior power.

Fifthly. Finally, and above all, it nurses in the country a fatal illusion, *in causing it to regard as a gain what is really a burden.* The advocates of protective duties assert, in fact, that as import duties are laid on foreigners, they do not burden the country at all; nay, that they actually add to the income of the state. This illusion, the benefits of which the protective system has reaped, has made its fortune, but ought really to be enough to condemn it.

For the effect of import duties is to add to the price of commodities, not only of the imported goods, but also of similar articles which are consumed at home, so that the public pays out from its pocket, in the shape of higher prices, ten times the sum that is gained by the State. Let us suppose that 10,000,000 hundredweight of foreign corn enter France, worth on their arrival 17 shillings the hundredweight. In consequence of the competition of this foreign corn the 80,000,000 hundredweight of corn, which are approximately the production of France, are also sold only at 17 shillings, and this is the precise subject of complaint. Let us then put a duty of four shillings on the importation of foreign corn. From the custom-house receipts the State (premising that this duty does not reduce the quantity imported) will gain $10{,}000{,}000 \times 4 = £2{,}000{,}000$. Now let us see how the public fares; not only will it pay four shillings more for each hundredweight of foreign corn, that is to say, £2,000,000, which is exactly equal to what the State receives, but also it will pay four shillings more for every hundredweight of corn produced in France, the French producers naturally hastening to sell their corn at the same price as the foreign producers; that is to say,

80,000,000 × 4 = £16,000,000. That is to say, these protective duties will have brought altogether £2,000,000 into the State coffers, and £16,000,000 into the pockets of home producers, but will have cost consumers £18,000,000. That is the decisive argument against import duties, and in spite of its efforts, the protectionist system has never succeeded in refuting it.

The usual answer is to assure us that import duties are paid by the foreign producers, and that the price of the imported commodity will not be increased. Allowing for one moment that this reply is a valid one, yet we should have to conclude from it that, since prices will not be changed, the national industry will not be protected one whit, and the criticisms we have just made on the system of protective duties will receive a last and even more clenching argument, "import duties are of no avail."

However, though this reply of the protectionists may be a sound one in certain particular cases, it cannot be accepted in a general way.

In consequence of a law, which is well known in this matter of imports under the name of the "law of transference," every tax paid by a producer or a merchant is laid by him on his goods, and thus falls upon the consumer. *A fortiori* this will be the case with the foreign producer. For how can it be reasonably supposed that a country has the power of throwing back on the foreigner all or part of its imports? Were such a pleasant receipt to exist, it is clear that each country would hasten to have its duties paid by its neighbors, and consequently no one would be a whit better off.

Yet this notion is constantly reproduced: people are never tired of saying that the United States, thanks to their protective system, have been skilful enough to make foreigners pay the interest on their national debt, and even the greater part of the principal. It must be confessed that the Americans have especially aided the spreading of this opinion by expressing it themselves in the most naïve manner. It can be judged from the following extract from a speech of Mr. Lawrence, Comptroller of

the United States Treasury: "By our customs tariff we inform the foreign manufacturer that he may send his products here, but that he must pay for this privilege. He is therefore compelled to reduce his prices and his profits, and to aid in the formation of that revenue which enables us to wipe out our public debt, and to pension off our soldiers who were maimed or wounded during the Civil War. This is distributive justice, since we force England and France to pay their share of the expenses of a rebellion which they maliciously encouraged." (Quoted in the *Économiste français*, 1882, Vol. I, page 441.) Similarly, when Russia resolved that, to renew her stock of money, customs duties should henceforward be paid only in gold, she evidently imagined that foreigners, when sending her their goods, would at the same time send the quantity of gold necessary for the payment of these duties. That was wonderfully innocent! It was the Russian buyers who were obliged to obtain the necessary gold, and not a piece more entered the country!

The argument of the protectionists may be sound, however, in one case which has been especially noted by John Stuart Mill. Every rise in price involves a reduction in consumption. The foreign producer will then have to ask himself whether it is not necessary for him to make a sacrifice and lower the price of his articles by a sum equal to the amount of the duty, in order to keep his custom by adhering to his former prices. The duty which falls on his products leaves him, therefore, on the horns of this unpleasant dilemma: either he must restrict the amount of his sales, or he must suffer a sacrifice in prices. It is not impossible that, when all is said and done, his interests may lead him to choose the second alternative, *i.e.* to burden himself with all or part of the duty. However, two conditions are requisite for his resigning himself to this extremity: *firstly*, his cost price may enable him to do so; *secondly*, he is unable to send his products to another market. It would be chimerical to base one's actions on such an eventuality; in any case, if this was realized by chance, the mark aimed at by the establishment of the protective duty is

missed. It is impossible to escape from this dilemma. Besides, observation of facts shows, at least in a general way, that protective duties induce a corresponding rise in price.

V. Why the Bounty System is Preferable.

If, then, a state judges that, under certain particular circumstances, it is useful to protect the national industry, it should resort not to the system of import duties, but to the far simpler and more candid system of *bounties*, whether in the shape of guarantees of interest or of direct subventions.

This method presents none of the disadvantages which we have shown to be inherent in the import duty system.

Firstly. It can be graduated at will, so as to protect only those who really need protection, and no others. It may be said, "that will be arbitrary." The system of protective duties is also arbitrary, the arbitrariness of a blind man; whereas this may be that of an intelligent one.

Secondly. It lays no shackles on foreign trade, and allows the full development both of imports and of exports, since it does not enhance the price of products.

Thirdly. It does not interfere with production, for it does not make raw materials dearer and does not raise the cost of production; on the contrary, it lowers it. It is true that, by granting a certain measure of security to the national industries, it may favor routine. That is an evil inherent in every possible system of protection; still, bounties may be established under certain conditions calculated to stimulate the progress of the protected industry. Thus the bounties granted by the law of 1881 to merchant shipping are more or less considerable, according as the ship is a sailing-vessel or a steamship, made of wood or of steel, and proportionate to its speed.

Fourthly. Finally, and above all, this system only professes to be what it really is — a sacrifice imposed on the country for a reason of public utility. It allows no illusion as to this, and gives

rise to no ambiguity. The public knows that it pays for this protection, and knows exactly the price that it pays. Thus it may be held to be certain that a State will only resort to such measures in so far as their utility is clearly perceived, and that in all cases they will not be extended beyond foreseen contingencies, nor prolonged beyond the fixed limit or term. Therein lies the economic and moral superiority of this system.

This it is that is little realized by the protectionists, and hence they rarely ask for the application of this system. They would have too much trouble in obtaining it. Yet the bounty system is practised in France in the shape of bounties for merchant shipping, both for building and for navigation, and is justly preferred to surcharges on foreign ships. In new countries it happens often enough that the State guarantees a certain interest on capital sunk in various industrial undertakings. Thus Brazil has granted a guarantee of six per cent on sugar manufactories, and a bill has been discussed in the Argentine Republic for granting a similar guarantee on "frozen meat" works.

VI. On Some Moderate Forms of Protection.

Some years ago a party was formed, which, demanding protection in a general way, asked for *reciprocity* in the matter of customs tariffs. This is called in England *fair trade*, in antithesis to free trade.

If the system is employed by way of reprisals to compel a protectionist country to lower its duties, — if, for example, England answered the prohibitive tariffs of the United States by heavily taxing American produce, — in that case it might very well be justified. As a matter of fact, though, such a question is political rather than economical.

If we go further, and attempt to discover in it a scientific theory, it is left without a leg to stand on. If the protective system is held to be beneficial, it should be adopted; if it is regarded as an evil, it should be rejected; but whether neighboring countries

adopt it or not is their affair, not ours. No doubt, were England to lay duties on American products, she would injure the United States, but she would hurt herself too; and the bad turn we are able to do our neighbor cannot be held to compensate for the harm we do ourselves.

Another revised system is that of *countervailing duties*. Its advocates assert that when a country bears a heavier load of taxes than foreign countries, to re-establish equality in competition it should burden foreign products with duties which are equivalent to the charges borne by its citizens.

This argument is entirely based on the notion that customs duties are borne by the foreign producers. If, as we have attempted to show, that is a pure illusion, and if these duties really fall upon our own people in the shape of a rise in prices, then we can appreciate the wonderful originality of this so-called compensation, which, under pretence of equalizing the struggle, doubles the burdens of the public.

Now if it is merely meant that foreign products ought to be laden with duties equal to those paid by the same products within the country, no one will contradict that principle of fiscal equality. Yet this equality is not always observed, even in protectionist countries. Thus one of the great grievances at the present moment (1888) of the vineyard proprietors and wine merchants in the South of France is, that Spanish and Italian wines enter the country with four or five litres of alcohol added per hectolitre, and pay only 2/6 (half-a-crown) import duty, whereas in France each litre of alcohol pays 1/4 (one shilling and four pence) as excise. That is an unjust privilege to the profit of foreign producers, and has been well called a sort of protection turned upside down.

CHAPTER VII.

CREDIT.

I. Credit Operations.

However ingenious exchange may be, it is an arrangement that cannot answer all needs; for, in order to obtain anything by exchange, one must be able to give in exchange an equal value. Now not every one is in a position to supply this value; if each person who required lodgings was obliged to buy a house, it is easy to understand how extremely awkward such a state of affairs would be.

Men have therefore been led to conceive an arrangement which is akin to exchange, but which is nevertheless different, to wit: *lending*, by means of which I can obtain a thing provisionally and make use of it for a certain space of time, on condition of merely giving to the person who surrenders it to me an *annuity* proportional to the time I have enjoyed the use of his article. The name given to this annuity varies according to circumstances, such as *farm-rent*, *house-rent*, *interest*. This is not the place to discuss the legitimacy or illegitimacy of this annuity; that will be dealt with when we come to speak of the distribution of wealth.

In popular speech, however, the word "credit" has a more restricted sense. It is applied not to the loan of anything whatsoever, say a piece of land or a house, but only to *the loan of a sum of money*. This is easily explained by the fact that, as money in modern societies is the form in which all capital is seen, every loan of capital usually takes the shape of a loan of money; but we ought further to note that the loan of money has a special characteristic which radically marks it off from the loan of a piece of land or of a house.

This special characteristic lies in the circumstance that the thing lent can only be utilized by the borrower on the condition that it is consumed, *i.e.* annihilated by him. The man who borrows capital in the form of a bag of money must evidently, whatsoever use he may wish to make of it, empty the bag down to the last shilling. Similarly the borrower of a sack of corn, whether he borrows to sow it or to eat it, is compelled to destroy the corn, whether he intends to put it in the ground or grind it under the millstone.

This characteristic is not specially confined to money; it is possessed by all things which in legal language are *res fungibiles* (*vide* Hunter, *Roman Law*, page 141), *i.e.* which are consumed at the first time of using.

The feature just discussed introduces into the contract now under analysis serious modifications, as much for the borrower as for the lender.

Firstly. The lender, to take him first, is exposed to far more considerable risks. The lender of a house or of a piece of land knows that it will be restored to him at the expiration of the lease; for he, so to speak, does not lose sight of it while it is in the possession of the borrower; but the lender of a *res fungibilis*, on the contrary, knows that he is irrevocably deprived of it; he knows that it is about to be destroyed, and that such is its destination.

The Roman jurisconsults had excellently remarked that the thing given *in mutuum* had to be *alienated*, thus differing from the thing given *in commodatum*, which is merely *lent*. For when the date fell due, the borrower was not bound to return the thing, for it no longer existed, but had to transfer the proprietorship of something equivalent.

The lender, true enough, reckons on an equivalent wealth to replace that which he has lent, but this wealth is still non-existing; it must be produced for that purpose, and everything that is future is *ipso facto* uncertain. Legislators, therefore, have exercised their ingenuity to guarantee the lender against all danger; and the precautions they have thought out to that end constitute one of the most important branches of civil law; to wit, guaranty, mortgages,

joint responsibility, etc. Nevertheless, a certain amount of trust is also required on the part of the lender, that is to say, an act of faith, and this is precisely the reason why men have confined to this particular form of loan the name "credit," which, by its etymological origin, presupposes an act of faith (*creditum, credere*).

Secondly. To turn to the borrower: he is not merely bound, like the farm-tenant or the lodger, to preserve the thing lent to him and to keep it in good condition, so as to return it at the expiration of the fixed time; after having used it, that is to say, destroyed it, he must labor so as to build up from it an equivalent, so as to wipe out his obligation at the appointed date. It is necessary, therefore, that he should be extremely careful *to employ this wealth in a productive manner.* If he is unlucky enough to consume it unproductively, say on personal expenses, or even if for any reason he fails to reproduce a wealth which is at least equivalent to that lent him, he is ruined. In fact, the history of all countries and of all ages is an actual martyrology of borrowers who have been ruined through credit. Credit, therefore, is an infinitely more dangerous instrument of production than those we have heretofore considered, and is a tool that should only be used by very experienced hands.

It is sometimes said that credit only differs from exchange in having for its object, not any commodities whatsoever, but merely capital. That is correct, for we know that we must regard as capital all wealth that is employed in the reproduction of new wealth. Now, as the operation just analyzed demands the productive employment of lent effects, it is right to say that the wealth which is the object of lending is or should be regarded as capital. So much the worse, then, for the borrower, if he is foolish enough to treat it as an income. He misunderstands the meaning of the contract, and for that reason the contract becomes for him a snare.

It is also said sometimes that credit differs from exchange in that it consists not in the exchange of two existing wealths, but in the exchange of a *present* for a *future* wealth. That, too, is a

correct statement, for we have just seen that the lender surrenders his article, in order to receive in exchange for it, at the date when his loan expires, an article which is at present non-existent, and which must be created during the interval.

Later on we shall find in this the explanation of interest and discount. There is another credit operation which holds an important place in commercial transactions, and is known under the name of "sale for a payment at a future date," or deferred payment. At first sight we might be led to think that sale for payment at a future date is nothing but a sale, and ought therefore to fall within our chapter on exchange. Yet it is nothing of the sort, for the buyer, in exchange for the article handed over to him, gives nothing, probably because he has no money; he merely acknowledges himself to be a debtor for the value received, just as if he had borrowed it. He is bound to apply himself to reproduce this value before the appointed date, if he desires to be able to pay it back. This clearly shows the feature alluded to above — the exchange of present wealth for future wealth. Still, one might say the borrower pays interest, whilst the buyer for deferred payment pays nothing of the kind. That is erroneous. The price of an article sold for deferred payment is also higher than the price of ready money sales. The difference, which is called *discount*, exactly represents the interest on the capital lent to the buyer.

The above are the fundamental credit operations.

II. Credit Papers.

Yet these operations required a further improvement. If it was very advantageous for the borrower, whether in the case of a loan, or of sale for deferred payment, to have capital at his disposal for a certain time, on the other hand it was exceedingly disadvantageous for the lender to be obliged to do without that capital for the same period of time. A manufacturer has daily to make purchases and pay wages. He renews day by day the capital which he requires by the sale of his goods, but if he sells these goods for

deferred payment, it certainly appears that he must abandon the hope of obtaining his cash, and that he will find it impossible to carry on his business.

What is to be done? Could it perhaps be brought about that the same capital should at one and the same time be at the disposal of two different persons, the man who has lent it and the man who has borrowed it?

Yes, that can be managed. It is by means of credit that this apparently insoluble problem is solved.

In exchange for the capital surrendered by him, the lender or the seller for deferred payment receives a document, *i.e.* a piece of paper in various forms, a note to order, a bill of exchange, etc., and this document represents a value which, like all other values, can be sold. If, then, the lender wishes to re-obtain his capital, nothing is simpler. It is enough for him to sell, or, as the phrase goes, to *negotiate* his paper.

The following are the two principal forms of credit documents: —

Firstly, the note to order, which is drawn up in this fashion: "On ninety days from date I will pay to Brown, or to his order, the sum of £400, the value received in goods. April 1, 1888. (Signed) JONES."

Secondly, the bill of exchange, after this fashion: "On ninety days from date pay to Robinson, or to his order, the sum of £400, value received in goods. April 1, 1888. (Signed) JONES."

The note to order, then, is simply a promise to pay, made by the debtor to his creditor. The bill of exchange is a little more complicated. It is an order to pay, addressed by the creditor to his debtor, an order to pay not to himself, the creditor, but to a third party. It is thanks to this form that the bill of exchange is especially employed to settle transactions between one place and another, or between different countries.

Each credit operation, then, gives birth to a credit paper. Since in every busy society these credit operations are exceedingly numerous, in consequence of the fact that each commodity is

often sold three or four times (each sale being for deferred payment, and therefore giving rise each time to a new credit paper), the credit papers which exist in a country like France or England represent an enormous mass of value, perhaps £400,000,000 higher in any case than the value of any class of goods whatsoever.

III. Whether Credit can create Capital.

Credit has attained such importance in our modern societies that we are tempted to attribute to it powers that are miraculous. By speaking every moment of great fortunes that are founded on credit, by stating that the largest enterprises of modern industry have credit for their base, we are persuaded into the belief that credit is an agent of production, which, just like land or labor, can create wealth.

Yet that is a phantasmagoric construction. Credit is not an *agent* of production; what is a far different thing, it is a special *mode* of production, just like exchange, just like division of labor. As we have seen, it consists of the transferring of wealth, of capital, from one hand to another, but to transfer is not to create. Credit creates capital not a whit more than exchange creates commodities.

This illusion has been fostered by the existence of credit papers. We have seen that each loan of capital is represented in the lender's hands by a negotiable paper of equal value. Hence it seems that the act of lending has the marvellous power of making two capitals out of one. The former capital of £100 which has passed into your hands, and the new capital which is represented in my hands by a bill for £100, do not they make two? From the subjective point of view that paper is capital. It is so for me, but it is not so for the country; for it is obvious that it can only be negotiable while another person is willing to surrender to me in exchange capital which he possesses in the shape of money or of goods. This paper, then, is not capital *per se*, but it simply affords me *the possibility of procuring other capital in lieu of that*

which I have given up. Besides, it is evident that whatever use I wish to make of this bill that I keep in my safe, whether I wish to devote it to the payment of my expenses or to productive purposes, I shall only be able to do this by converting this paper into objects of consumption or instruments of production which are already in the market. It is then with this wealth afforded by nature, not with these bits of paper, that I shall produce new wealth or merely obtain nutrition.

Mr. MacLeod has earned special distinction as advocate of this thesis, that credit papers constitute real wealth and actual capital. He is logical enough in his conclusions, for he defines wealth as "everything which has an exchangeable value." Now as credit papers have incontestably an exchangeable value, they must certainly be reckoned as wealth. But it is the definition that cannot be admitted. If every credit paper, *i.e.* if every claim, were actually wealth, were each Frenchman to lend his fortune to his neighbor, by this one act the wealth of France would be simultaneously and instantly doubled; *i.e.* would rise from £8,000,000,000 to £16,000,000,000 sterling. Mr. MacLeod insists on the statement that these papers at least represent *future wealth*. No doubt; but it is precisely because they are future that they can serve for nothing, and should not be reckoned as existing wealth. They will be reckoned as soon as they have begun to exist. Till that time there will always be this difference between present and future wealth: the former exists, the latter does not exist. We produce and live by means of existing; we could neither live nor produce with wealth *in nubibus*. It would be as sensible as, when making the census of the population of France, to add, as an earnest of the future members of society, all those who will be born twenty years hence!

Yet, though credit cannot be termed productive, in the sense that it does not create capital, nevertheless it renders eminent services to production in the following manner: —

Firstly, by utilizing existing capital to the best possible advantage. For if capital could not pass from one person to another,

and if each man were reduced to making a direct use of what he possessed, an enormous amount of capital would lie idle. In fact, in all civilized societies there are a number of people who cannot work their own capital:

To wit, *those who have too much;* for as soon as a fortune exceeds a certain figure it is not easy for its owner to obtain the full profit from it by his unaided strength, without taking into consideration the circumstance that usually, in such cases, the possessor has no inclination to make such an effort:

Those who have not enough; for workmen, peasants, domestic servants, who make small savings, cannot of themselves productively employ such tiny capital. Still, when once these savings are combined, they may make hundreds of thousands of pounds:

Those who, by reason of their age, their sex, or their profession, cannot themselves employ their capital in industrial enterprises. This is the case with minors, women, persons who have devoted themselves to a liberal profession, such as lawyers, doctors, military men, clergymen, public servants, and *employés* of all classes.

To reverse the picture: there are people in the world, such as promoters, inventors, agriculturists, nay, even workmen, who could easily make a good use of capital, if they only had it. Unfortunately they have not.

But if, by means of credit, capital can pass from the hands of those who cannot or will not put it to account to the hands of those who are capable of employing it productively, that will be of great profit to each one of them, and to the whole country. Now, in every country, we can count by millions of pounds the value of capital withdrawn in this manner, either from sterile hoarding or from unproductive consumption, thus fertilized by credit.

2. *Secondly, by causing the formation of new capital.* For if people were unable to look forward to the employment of their savings in loans, many persons, especially those just enumerated, would no longer be anxious to save, no possible future use being open to them. As to this point, see further on, "The Conditions

Necessary for Saving." In fact, credit is to capital what exchange is to wealth. We have previously seen that by transferring wealth from one possessor to another, exchange certainly does not create wealth, but none the less utilizes it and incites to its production.

3 *Thirdly, by allowing the saving of a certain amount of metallic money.* This function of credit has already been discussed by us at length. We need not repeat the discussion here.

IV. Banks.

We saw above that exchange of commodities was scarcely possible without the aid of certain middlemen whom we call traders. In the same way trade in capital would be impossible without the assistance of certain intermediaries who are termed *bankers*.

Bankers are just like other business men. Business men as a class deal with commodities; bankers deal with capital, in the shape either of credit papers or of coin. The former buy in order to sell again, and make their profits by buying as cheaply as possible to sell as dearly as possible. The latter borrow in order to lend, and make their profits by borrowing as cheaply as possible in order to lend as dearly as possible. Here, then, are the two fundamental operations of all banking business, borrowing and lending; and as these borrowings are usually effected in the form of *deposits* and these loans in the form of *discounts*, they are generally called *deposit and discount banks*.

However, there is a third operation which is very different from the other two, though fundamentally it, too, is a mode of borrowing. We refer to the *issuing of bank notes*. But this operation is not essential to banks; nay, in most countries it is an exceptional and privileged function which belongs only to certain banks which are called *banks of issue*.

The history of banks is closely connected with the history of commerce ever since the Middle Ages. The creation of each great bank marks a new stage of commercial development. The first banks were those of the Italian Republics, Venice (? 1156)

and Genoa (1407). Commercial pre-eminence then passed to Holland, and we come to the great and celebrated Bank of Amsterdam (1609), speedily followed by those of Hamburg and Rotterdam. Finally, the creation of the Bank of England in 1694 teaches us that that nation is about to succeed to the commercial supremacy of the world. The Bank of France did not rise till much later, only at the beginning of the present century. Nevertheless, in 1716, Law had founded a famous bank, the sad termination of which is well known to all the world.[1]

Let us now examine in succession these three different operations — Deposits, Discount, and the Issuing of Notes.

V. Deposits.

The banker's first task is to obtain capital. No doubt he can make use of his own capital or of those more considerable sums which may be furnished by association, and which in our great loan-societies may rise to some thousand millions pounds sterling. But if the banker carried on his operations only with his own private capital or that of the association, he would make but small profits and even would render little service to society: we shall soon see the reason for this. He is obliged, then, to carry on his operations by means of the money of the general public, and for that reason has to borrow it from them. (Many large banks never use their own capital in their business; they invest it, either in real property or in stock, as a reserve or a guarantee to their clients. This is done by the Bank of France.) But how does the banker borrow this money from the public? Not after the fashion of a government or a corporation, or even an industrial society, which borrows for a long date, in the shape of stocks, debentures, or shares, the capital which its owners seek to invest. No; such a mode of borrowing demands too high a rate of interest for the banker to find any profit on such transactions. What the banker

[1] See *Dictionary of Political Economy*, edited by R. H. Inglis Palgrave, article "Banks" (1891). — J. B.

asks from the public is that circulating, floating capital which exists in the shape of coin in our trousers-pockets or in the drawers of our safes. In every country there is to be found in this form a considerable amount of capital, which is in nowise fixed, does nothing, produces nothing, and waits for the moment of employment.

The banker says to the public, "Entrust it to me till you have found some employment for it. I will keep it for you, and will return it you when you require, at the first demand. While you thus wait I will give you a low interest on it, say $1\frac{1}{2}$ or 2 per cent. This will be always more than it produces for you; for whilst it is in your strong-box it yields you no returns, and in any case you will avoid the trouble and anxiety of keeping it. Nay, if you wish it, I will do you the service of being your banker, of collecting your yearly income, cashing your coupons, and of paying your creditors, according to the instructions you give us, all which will be very convenient to you." Where this language is heard and understood by the public, bankers can obtain in this way, on very easy terms, a large amount of capital, by draining, so to speak, from circulation, the coin which is scattered about the country. The Journal of the Statistical Society of London for September, 1884, reckons that the sum total of the deposits thus received by the banks of the whole world amounted to £2,508,000,000, £965,000,000 of which were for England and her colonies combined.

Sometimes, however, bankers pay no interest on deposits. Certain banks, such as the Bank of England or the Bank of France, refuse to give any interest, for they consider that they render a sufficient service to the depositors whose money they receive; and no doubt they are right, for they obtain enormous sums on deposit. A step further, too; in former days, the deposit banks, those time-honored banks, for instance, whose names we gave a page or two back, actually demanded interest to be paid them by the depositors as recompense for keeping safely, as remuneration for services rendered.

But most modern banks are accustomed to give their depositors

a small interest, in order to attract, by means of that bounty, the largest possible amount of deposits. Naturally enough, the interest is a little higher if the depositor agrees not to demand back his money for a certain period, say six months, a year, five years, etc.

We have already observed more than once that in England, for example, it is customary for wealthy people to keep no money in their own houses, but to deposit it all with their bankers. If they have a payment to make to a tradesman or any other creditor, they simply send this creditor to receive payment at their banker's, by giving him an order of payment drawn up on a sheet detached from a note-book with perforations, which is called a *check*. This custom is beginning to become universal in all countries. But we should note that the check is not, properly speaking, a credit paper; it is an order to pay from funds which the banker should have in hand for his customer's account.

VI. Discount.

Once that this floating capital has been borrowed by the bank at a cheap rate, it is the banker's business to turn it to account by lending it to the public. But how? The banker cannot lend it for a long date, say, by way of mortgage or of advancing funds for a sleeping-partnership in industrial enterprises. He is obliged not to forget that he only holds this capital on deposit; that is to say, he may be obliged to reimburse it at a moment's notice; he consequently can only let it out of his sight for short-dated transactions, which merely deprive him of the disposal of this capital for a short time, and which therefore in some measure allow it to remain within his grasp and beneath his eyes.

What loan operation can fulfil these conditions?

There is one which complies with them admirably.

When a merchant has sold his goods for deferred payment, according to the usage of commerce, if he happens to have need of money before the expiration of the time, he turns to the banker. The latter then advances the merchant the sum which is

due to him for the sale of his goods, making a deduction of a small sum which constitutes his profits, and receives in exchange the claim of the merchant upon his purchaser, *i.e.* his bill of exchange. The banker keeps this bill of exchange in his safe, and on the day fixed for the expiration of the bill he sends it to the debtor to be exchanged for cash; in this way he recoups himself for the capital he had advanced.

The above process is what is called *discount*. It is, we may say, a form of loan; for it is clear that the banker who, in return for a bill of exchange for £50, payable in three months, advances to the merchant £48 5*s*, to receive from the debtor at the expiration of the bill the full sum of £50, has in fact lent his money for a period of three months at an interest of six per cent or rather more. Moreover, it is always a short-dated loan; for not only are the bills of exchange negotiated by the bank payable within a time which rarely exceeds three months, but this is a maximum which, in average cases, is never reached. The negotiators are not always able to negotiate their bills of exchange on the day after they have been sold; they may have to keep them docketed for some time: it is even possible that they may not be called upon to negotiate them till the eve of the expiration of the bill. At the Bank of France the average period during which bills of exchange are kept is from forty to forty-five days. It is therefore only for a very short space that the banker deprives himself of the money he has received on deposit, for in the short period of six weeks on the average every shilling which has left returns to his safe.

It would be difficult to find a loan operation which better complies with the exigencies of deposit. Let the demands for reimbursement of deposits be grouped together during a period of above six weeks, and the banker, thanks to his own cash receipts, will always be able to cope with the demands. Now it is scarcely probable that these demands will be so frequent, at any rate during normal times.

Still we must not conceal the fact that the banker has certain risks to run. If all the depositors were to arrange to come and

ask for their money on one and the same day, the bank would obviously be unable to satisfy them, for their money is at that moment here, there, and everywhere. True enough, it will speedily return to the banker's keeping, but there is always this difference between capital borrowed by the bank as deposits and capital lent by it as discount: The former can always be demanded back from the bank at a moment's notice, whereas it can only ask for the latter to be returned at the end of a fixed period; and that difference is enough, at any particular time, to cause bankruptcy.

But is this problematical danger a sufficient reason to deter banks from making use of the capital they receive on deposit, and to oblige them to keep such moneys as actual deposits, after the fashion of the old banks of Venice or of Amsterdam? Certainly not. Every one would be discontented.

Firstly. The depositors themselves; for it is clear that if the bank was compelled to keep their money in its vaults without employing it, instead of being able to give them a bonus in the form of interest, it would be the bank that would have to require the payment of interest, to compensate for the cost of keeping. It is better, then, for the depositors to run the risk of having to wait a few days for reimbursement, than to hoard their money at home unproductively, or to be obliged to pay for its safe keeping elsewhere.

Secondly. Society, too; for the social utility of banks consists in combining scattered and unproductive capital in the form of coin, so as to make out of it active and productive capital. This social function would evidently disappear from the moment that banks were unable to make use of their deposits.

Banks, then, do not hesitate to use the sums confided to their charge; but in order to face any possible demands or runs, they are always careful to keep a certain *reserve*.

It is impossible to prescribe *a priori* any proportion between the amount of the reserve and the sum total of the deposits. A bank's reserve should always be the larger, the slighter its credit and the more numerous its large deposits. It should, in particular,

strengthen its reserve during commercial crises, on the advent of the issues of government stock, or of debentures, — in a word, under all circumstances when it can foresee that the depositors will require their money. Contrary to the usual belief, the amount of the reserve of the Bank of France is not fixed by law. It might be *nil*, but it is usually excessive.

However, discount is not the only way in which banks can make use of their capital. They lend them also —

Firstly. In the shape of *advances on bills; i.e.* by taking in pledge movable property, and being careful that the sum lent shall be sufficiently lower than the value of the goods or stock-exchange securities. This process is one of the most important lines of business of the Bank of France.

Secondly. In the shape of credit that they open for their customers. When they have a *running account* with it, the bank can allow them to withdraw more than they have deposited; in other words, it practically gives them a loan. Still, as this method of loan (lying *uncovered*, as the term goes) is exceedingly dangerous, and presents no guarantees, some banks refuse to practise it. It is absolutely forbidden by the regulations of the Bank of France.

VII. On the Issuing of Bank Notes.

As with all other business men, it is to the banker's interest to extend his operations as much as possible. By doubling them, he doubles his profits. How is this effected?

The banker does not generally find it difficult to find a use for the capital he holds. There are always plenty of people who desire to borrow. By lowering the rate of discount he can negotiate as much paper as he wishes.

But, before being able to lend capital, a prior condition is necessary; namely, to possess capital. There's the rub! In fact, it is not so easy to find lenders as it is to meet with borrowers. It is necessary that the public should bring their money to deposit, and it may happen that they are not very eager to do so.

Now if the banker could create capital *de novo* in the form of coin, instead of having to wait patiently till the public is willing to bring it to him, nothing would prevent him from extending his operations indefinitely.

Some bankers, then, conceived the ingenious idea of thus creating the capital they needed by the issue of simple promises to pay, *i.e. bank notes*, and experience has proved the excellence of the device by its perfect success. This ingenious invention is attributed to Palmstruch, who founded the Bank of Stockholm in 1656. It is true that the Italian and Amsterdam banks issued many notes, but these merely represented the money the bankers had in their safes; in other words, were only receipts for deposits.

In return for commercial bills which are presented to them to discount, the banks, instead of paying in money, give notes. But it may be asked, How is the public brought to accept this combination? In return for a bill of exchange which he comes to have discounted, the business man receives merely another credit paper; that is to say, a bank note. What use is it to him? He wants money, not credit papers; for as regards paper he might just as well have kept that which has passed into his own hands.

It is enough to remark that, though the bank note is really only a credit paper, just like the bill of exchange, yet it is far more convenient paper.

The following characteristics differentiate it from credit papers, and particularly from bills of exchange:—

Firstly, it yields no interest, not a whit more than a coin. Its value, therefore, is always the same and is not liable to vary according to the distance from the day when it falls due.

Secondly, it is transferable to bearer, just like a coin, and is not subjected to the formalities and responsibilities of endorsement. We are all aware that the transference of credits, and especially the question of knowing when this transfer was possible, was one of the most delicate questions in Roman Law. In the French Civil Law such a transference is still subjected to somewhat com-

plicated formalities. Even in Commercial Law, though these formalities have been simplified as much as possible, it is still necessary for the transference of a commercial bill to John Smith that the lender should write on the back, "Pay to the order of John Smith," together with his signature and the date, and thus himself becomes liable in case of non-payment. This is what is known as *endorsement.*

Thirdly, it is payable at sight, i.e. at any time whatsoever, whereas a commercial bill is payable only at a specific date.

Fourthly, it is always payable on demand, whereas credit papers are payable only on maturity.

Fifthly, it is for a round sum, thus harmonizing with the current money systems, ten pounds or one thousand francs or fifty dollars, whereas other credit papers, which represent commercial transactions, usually involve fractional amounts.

Sixthly. Lastly, *it is issued and signed by a well-known bank,* the name of which is usually familiar to every one, even to those of the public who are not versed in commercial matters; for instance, the Bank of France or the Bank of England; whilst the names of the signatories of bills of exchange are scarcely known except by those persons who deal with them.

Observe, however, that when the particular promise to pay is destined to circulate like a bank note, the solvency of the debtor is not so keenly scrutinized as when it is a bill intended to be docketed, such as a certificate of stock, a share, or a debenture. Indeed, this holder for a day has no need to trouble as to future solvency: his affair is merely present solvency.

All the above considerations cause the bank note to be really accepted by the public as ready money and to become pure paper money. In France and England, too, the bank note is also legal tender, just as gold pieces and the five-franc silver piece; but we must not fall into the common error of comparing legal tender with forced currency.[1] A bill is legal tender when creditors or

[1] It is impossible to reproduce the play upon words of the original, "cours *légal* et cours *forcé*." — Translator's note.

sellers cannot refuse it in payment. A bill has forced currency when holders have not the right to demand from the bank its reimbursement in cash. Forced currency always presupposes legal tender, but the reciprocal does not hold good. Bank notes are legal tender in France and in England, but they do not possess forced currency. Every one is obliged to accept them, but every one, if he likes, can have them cashed by the bank.

It is obvious, now, that banks must derive great benefit from the issuing of notes. On the one hand it provides them with the resources necessary for indefinitely extending their operations, but within those limits that prudence dictates, and which we will examine presently. On the other hand, this capital which they obtain in the shape of notes is far more profitable to them than what they receive as deposits; for the latter, as we have seen, costs them one or two per cent interest, whereas the former merely costs the expenses of manufacture, which are of no importance.

But we must not conceal the fact that, though this operation may give bankers splendid profits, it is also capable of causing them serious dangers. For the sum total of notes in circulation which can at any moment be presented for reimbursement represents a debt which is immediately payable, on demand, just as the capital resulting from deposits. Consequently, the bank is henceforward exposed to a twofold peril: it has to meet at the same time the reimbursement of its deposits and the cashing of its notes.

If the necessity of a reserve forced itself upon bankers, when they had only to meet the reimbursement of deposits, *a fortiori* is it felt when to the debt payable at sight, resulting from its deposits, is added this further debt that amounts to the sum of the notes the bank has in circulation.

Unfortunately, as money that lies idle in cellars gives no profits, the self-interest of banks pushes them to reduce their reserve to the minimum, and they find it difficult to resist the temptation. If the Bank of France, for instance, was a private bank and was exempt from the rigorous provisions of the law, it is certain that the shareholders would protest energetically against the locking

up of its two millions of francs in hard money, and would clamor for their employment as discount or in any other lucrative manner.

VIII. The Differences between the Bank Note and Paper Money.

Bank notes and paper money resemble one another so closely that the public scarcely understands the difference between them. Both of them stand for money; but the bank note possesses three charactistics, or rather presents three guarantees, which are absent from paper money.

Firstly. In the first place and above all, the bank note is always payable in cash, *i.e. convertible into specie*, at the holder's will, whereas paper money is not. The latter, indeed, has the appearance of being a promise to pay a certain sum, and the holder may entertain the hope that one day or other the State, when in better circumstances, will reimburse the value of its paper; but this more or less distant prospect (in Russia, in truth, it has not been realized for over a century) scarcely affects those who receive these notes and have no intention of keeping them.

Secondly. Again, the bank note is issued in *the course of commercial transactions*, and only to the extent necessitated by those operations, — *e.g.* for an equal value (less discount) to that of bills of exchange which are presented for discounting, — whereas paper money is issued by the government for the purpose of meeting its expenses, and this emission has no other limits or rules than the financial necessities of the moment.

Thirdly. Finally, as the name itself shows, the bank note is issued *by a bank*, that is to say, by a company which, though perhaps called a government bank or a public bank, is none the less a company whose principal object is the carrying on of business transactions; whereas paper money is issued by a government.

Thus the bank note is very distinct from paper money. Still it may sometimes approach remarkably close to the latter, through losing all or some of the characteristics described above.

Firstly. It may happen that the bank note may have *forced currency*, *i.e.* be no longer payable in cash, at any rate for a longer or a shorter period. This occurs at times of crisis for the notes of almost all the great banks.

In that case there still remain between the bank note and paper money the two other differences we have pointed out, particularly the second one. The quantity issued is neither unlimited nor fixed in an arbitrary manner. It is always regulated by the actual needs of commerce. That is a powerful guarantee.

Secondly. It may happen that the bank note not only receives forced currency, but that, instead of being issued to supply commercial transactions, it is issued merely for the purpose of making advances to the government, and of enabling it to pay its expenses. This is how the affair is usually managed. The government needs money. It says to the bank, "Make us some hundred million notes, which you must lend us, and we will cover you by granting them forced currency."

In this case the second guarantee disappears. The emission of notes has then no other limit than the necessities of the government, and in such circumstances we must confess that the bank note remarkably resembles paper money.

This is just what occurred during the Franco-German War of 1870. The French government borrowed from the Bank of France, by various instalments, a total sum of £58,800,000, but its first step was to declare them forced currency.

Still, even in such cases as this, the third difference subsists, and it of itself is enough to render the bank note, even under these conditions, far less subject to depreciation than is paper money. This has been so thoroughly proved by experience that States usually abandon the right of directly issuing paper money, and have recourse to the intermediary services of banks. For the public thinks that the bank will resist as long as possible any exaggerated issue of notes that may be attempted to be forced on it, since that is the road to ruin. The public also believes, and unfortunately not without reason, that the solicitude of a financial company,

which has to guard its own moneys, is more vigilant and more tenacious than that of a government or financial minister which has only to look to the interests of the State.

IX. The Rate of Exchange.

The safes of all great banking houses, at any rate of those whose operations extend abroad, are crammed with bundles of bills of exchange, payable at all places in the world. They stand for effects worth many million pounds, and are the object of a very active trade. They are called *paper on London*, *paper on New York*, etc., according to the place at which the paper is payable.

The bankers who hold them and who deal in them are clearly nothing but middlemen. We must ask then, from whom do they buy such goods, and to whom they sell them?

First of all, from whom do the French bankers buy them? From those who produce them, that is to say, from all those persons who, for one reason or another, are creditors of foreigners; *e.g.* from French merchants and producers who have sold goods to foreigners, and who, on the conclusion of the sale, have drawn a bill of exchange on their purchaser in London or New York. If it happens that the merchant needs money before the bill becomes due, or merely if he finds it inconvenient to send his bill abroad to be settled, he will pass it on to his banker, who will buy it from him; I mean, will discount it for him.

To whom, now, do the bankers sell it? To all who need it, and they are a numerous class. This paper is much in demand with all persons who have payments to make abroad; *e.g.* French merchants who have bought goods from foreign houses. If they have not been able to make the seller draw a bill on them, they will be obliged to send in cash the sum total of the price right away to the residence of their creditor; but, if they are able to obtain paper payable on the place where their creditor lives, they have then a far easier and less costly mode of settling their debts.

It would appear that this paper ought to be sold, or negotiated, as the phrase goes, for a price that is always equal to the sum of money it gives the right of obtaining. Thus a bill of exchange for £100 ought to be worth £100, neither more nor less. As a matter of fact, nothing of the sort happens. It is obvious that important conditions which cause the value of the paper to vary are the amount of confidence reposed in the signature of the debtor, and the nearness or distance of the date when the bill falls due. But, even after abstracting these self-evident causes of variation, even supposing that the paper is payable at sight and above suspicion, still its value will vary every day according to the oscillations of supply and demand, just as the value of any other commodity. These variations are what are called the *rate of exchange*, which is quoted in the papers like the Bourse (Stock Exchange) rate.

It is easy to understand what is meant by supply and demand as applied to commercial bills. Let us suppose that the *claims* of France abroad, whether for her exports or for any other cause, amount to £40,000,000. Let us further suppose that the *debts* of France abroad, whether for her imports or for any other cause, amount to £80,000,000. It is probable that there will not be enough paper for all who require it, for the supply cannot exceed £40,000,000, and the demand may rise to £80,000,000. All people, therefore, who require this paper to settle their accounts, will bid highly for it. Foreign paper will rise in value, that is to say, a bill of £100, payable in Brussels or in Rome, will, instead of being sold for £100, be sold for £102 or £105. Thus, as the term goes, it will be *above par; i.e.* will *rise to a premium*.

The business of measuring and quoting these variations in the rate of exchange has been raised to the height of a science. The unit usually taken for the bill of exchange is a hundred monetary units, — francs, dollars, roubles, marks, florins, etc., — and the question is to discover whether the quoted price is less or higher than the nominal value. For instance, let there be a bill of exchange on Hamburg for 100 marks: as the mark is worth 1 franc 22

centimes, the nominal value of this bill is 122 francs. Still, in the exchange on London the unit taken is the one-pound bill of exchange, the actual value of which in French money is 25 francs 22 centimes. The exchange on London, therefore, is at par every time that on the Paris Bourse paper on London is quoted at 25 francs 22 centimes.

Now let us look at the converse. If we suppose that the claims of France abroad rise to £80,000,000 sterling, whilst the debts contracted abroad by France only reach £40,000,000, it is probable that paper will be superabundant, for there will be £80,000,000 to dispose of and the settlement of the exchanges will absorb only £40,000,000. A great number of bills, then, cannot be negotiated and can be only utilized by being sent abroad to be cashed. Bankers, therefore, will strive to get rid of such papers by disposing of them even below their actual value. Thus the hundred-pound bill on Brussels will be disposed of at 99.8 or 99.5 ; *i.e.* it will *fall below par*.

Every time that in any country, say France, paper payable abroad is quoted above par, the exchange is said to be *unfavorable* to this country, France, as regards specie. What does this mean? That the price of the paper is unfavorable to the buyers? No ; for then we should have to say that this rate is favorable to the sellers. The meaning is that the rate of exchange, under these conditions, shows that the claims France holds abroad are not sufficient to balance her debts contracted abroad, that consequently, to settle the difference, she will have to send abroad a certain quantity of coin. The rise in the rate of exchange, otherwise called dearness of foreign paper, presages, as an infallible symptom, a going out of coin, and therefore we use the expression "unfavorable exchange."

Inversely, whenever in France foreign paper is quoted below par, the exchange is said to be *favorable* to France, and the train of reasoning is the same. The fall in the price of foreign paper shows that when all reckonings have been made, the balance is to the credit of France, and is therefore followed by entries of coin.

No doubt we must not use these words "favorable" and "unfavorable" in an absolute sense, for we know that the fact of a country having to send much coin abroad, or to receive it therefrom, constitutes neither a great peril nor a great advantage, and that in any case the circumstance is merely temporary. But from the banker's point of view this situation is of very great importance, for if money has to be sent abroad, it will be taken from the chests of the banks. All the premonitory signs, therefore, are of capital importance to bankers, and they always keep their eyes fixed on the rate of exchange, just as sailors watch the barometer. (See the next section, "The Raising of the Rate of Discount.")

Still, we must observe that variations in the price of paper are confined within far narrower limits than are those of ordinary commodities. This price, at any rate during normal periods, save for the exceptions about to be noted, is never quoted either much above or much below par. This fact is explained by two reasons.

Firstly. Why does the business man, who is a debtor of the foreigner, seek for bills of exchange? Merely to save the expenses of sending over coin. But, as soon as it becomes clear that the premium he would have to pay to obtain the bill is higher than the cost of transporting coin, he would no longer have any reason for buying. For their part, too, the merchant who is a creditor of the foreigner, and the banker who acts as middleman, only seek to negotiate these bills of exchange to avoid the trouble of having to send them abroad to be cashed, and the subsequent carriage of the coin. But clearly, rather than sell these bills at a low price, the merchant or banker would prefer the above cumbrous method of procedure. To sum up, as the trade in paper money has no *other aim than to serve to economize the cost of transporting coin*, it is easy to understand that this trade will cease to have any *raison d'être* as soon as it becomes more expensive for the parties concerned than the direct sending of coin; *i.e.* as soon as the variations in price, whether above or below par, exceed the cost

of carriage. Now these expenses, even with insurance thrown in, are extremely small; extremely small, therefore, must also be the variations in the rate of exchange.

Secondly. But these variations are limited by another cause, which at one and the same time is more remote and more subtle. Let us suppose that the price of the foreign bill of exchange rises above par, *i.e.* that the merchant who has drawn upon his foreign buyer a bill for £100 can sell it for £111. It is clear, then, that those £11 are so much added to his profits on the sale. Instead of gaining 10 per cent, as he perhaps expected, he gains 11 per cent. These additional profits for all those who have sold abroad will induce a large number of merchants to follow their example; in other words, "the rise in the rate of exchange acts as a premium on exportation."

For instance, after the war of 1870 the exports of France increased enormously for several years. Why? Because, the huge payments that the French had to make to Germany having caused foreign paper to rise greatly above par, the profits that exporters obtained from the paper they drew on their foreign debtors were such that they could content themselves with an extremely small profit on the price of their goods, and could, if necessary, sell them at a loss. Thus the French had come to sell to the foreigner, less in order to gain on the price of the goods than to gain on the price of the bill.

Now, in direct ratio to the increase of exports will be the multiplication of the bills of exchange to which they give rise, and the value of these bills, according to the general law of supply and demand, will fall progressively, until it has descended below par.

Inversely, if the paper falls below par, it is easy to prove by the same reasoning that this depreciation will entail a loss on the merchants who have sold goods abroad, and will consequently tend to reduce exports, and then by reaction to reduce the supply of foreign paper, until its value has risen again to par.

In the whole matter there is nothing more than the ordinary mechanism of supply and demand, which, whenever the value of

a commodity is disturbed from its equilibrium, tends to bring it back to that position, either by an increase or by a restriction of production.

Nevertheless, this general law produces in this instance a very curious effect, the consequences of which are very important from the point of view of international trade. Whenever the balance of trade is unfavorable to a country, *i.e.* when its imports exceed its exports, the resulting rise in the rate of exchange tends to reverse the position, and to make the balance of trade favorable by increasing exports and reducing imports. The rate of exchange, then, constantly acts on trade like those regulators of steam-engines, which always tend to restore the velocity of the engine to a state of equilibrium, and a variation of a few pence is thus enough to restore to equilibrium balances which amount in value to many thousand millions sterling.

We said that in exceptional cases the rate of exchange may vary in considerable and even unlimited proportions. Here are the circumstances : —

Firstly. When the place on which the paper is payable is very distant, or the means of communication with it are difficult, as the cost of sending coin is much larger, the variations in the price of bills of exchange will also be far more marked. Paper on Khartoum or even on Samarkand will certainly be accepted, even if the taker has to pay 10 or 12 per cent above its nominal value, and, reciprocally, it will always be to the creditor's interest to negotiate it, even at 10 or 12 per cent below par.

Secondly. But it is especially when we are dealing with a country whose money is depreciated, that the variations in the rate of exchange may become excessive and, relatively speaking, unbounded. Here is a bill of exchange on St. Petersburg for 100 roubles ; the real value at par would be 400 francs (£16), the rouble being worth 4 francs. Yet, if we consult the rate of exchange, we shall see that paper on St. Petersburg (July, 1890) costs 286 francs, or a huge depreciation of 30 per cent. How could it be otherwise? Such is exactly the depreciation of the money

current in Russia, the paper rouble, and naturally a bill payable in that money must undergo an equal depreciation.

It is enough, then, to read the rates of exchange, even if we have no other acquaintance with the economic and financial state of the different countries, to be able to perfectly understand their situation, and to divine whether they buy more than they sell, or sell more than they buy, whether their currency is depreciated, and what is the exact amount of that depreciation.

Thirdly. Whenever, for one cause or another, the debtor finds it hard to obtain money, — either because his credit is limited or because the banks make difficulties about discounting for him, — the rate of exchange may rise greatly above par. For example, after the payment of the five milliards war indemnity to Germany, France, as is easily seen, had some trouble in obtaining that enormous ransom, and the French government, in order to extricate itself, sought everywhere for paper on Germany, or even on London, in order to pay by way of *arbitrage;* in consequence the rate of exchange on Germany and even on London for long continued to be above par.

This *arbitrage* is only a more complicated operation of exchange. Here is the explanation. It is not only at Paris that paper on London is to be found ; it is obtainable at all the commercial centres of the world. If, then, it is too dear at Paris, an attempt may be made to find a place where, in consequence of different circumstances, it is cheaper. Now this operation, which consists in buying paper where it is cheap to sell it again where it is dear, is what is called *arbitrage.* It produces the interesting effect of extending through all countries facilities of payment by means of *compensatio.* For dearness of paper points to a place where debts exceed credits, the former of which, consequently, cannot be liquidated by means of *compensatio* alone. But by the aid of the paper which the practisers of *arbitrage* seek to obtain abroad (which they seek for in places that are in the converse position, *i.e.* where claims exceed debts, for there only can the paper be got cheap), equilibrium can be re-established and the sum-total of debts can be settled by way of *compensatio.*

X. The Raising of the Rate of Discount.

There is one case in which banks are liable to have to reimburse a great quantity of their notes; viz. whenever they have to make considerable payments abroad. As these payments must be made not in notes, but only in coin, the bank will be applied to to convert the notes into specie.

If, after a bad harvest, some million hundredweight of corn have to be bought abroad, a large sum of money, amounting to a good many millions sterling, will have to be sent to America or Russia, and the bank may be certain that the larger part, if not the whole, of this sum will be fetched from its chests. As we have seen, the safe-rooms of the bank are the reservoir in which accumulates the largest portion of the floating capital of the country in the shape of coin, and the only one that can be drawn on in cases of urgency. Such a situation may be dangerous for the bank, if its reserve, especially of gold, is not very large. Happily, it receives prior warning of this situation by a sign which is safer than that given by the barometer to the sailor or by the "manometer" to the mechanician, — in a word, by the rate of exchange. Thus, if the exchange becomes unfavorable, *i.e.* if foreign paper is negotiated above par, that is a proof that the debtors who have payments to make abroad are very numerous, far more numerous than those who have payments to receive, and that consequently, inasmuch as the balance cannot be settled by means of *compensatio*, coin must be sent abroad to make up the difference (see a few pages back). Now that the danger has been perceived, the bank can take its precautions.

To guard against this eventuality of too heavy cash payments, it must take the measures necessary *either for increasing the reserve or for diminishing the quantity of its notes in circulation*, the latter of which comes to the same thing as the former, and is more easily executed. For the bank, in truth, cannot increase its reserve, but it can refuse to issue any more notes, *i.e.* it can refuse to make any more loans to the public in the shape of advances, or as dis-

count, by which two modes we are aware that the bank issues notes. It is clear that such a course of action would achieve the desired end; for, on the one hand, the issue of notes being stopped, the quantity already in circulation would not be increased. On the other hand, the commercial bills docketed at the bank successively falling due would each day cause the return of a considerable quantity, either of notes, which would proportionately diminish their circulation, or of coin, which would proportionately increase the reserve.[1]

The quantity of notes in circulation can be compared to a current of water which, entering by one tap and leaving by another, is constantly renewed. The flow of notes enters into circulation by the "issuing" tap, *i.e.* by discount, and leaves circulation to return to the bank by the tap of "entries." If the bank closes the issuing tap while leaving the other open, it is obvious that circulation will speedily be completely dried up.

Let us suppose that the bank holds commercial bills to the value of £40,000,000 sterling, that its reserve amounts to £40,000,000 in coin, and that its notes in circulation come to the figure of £80,000,000. In such circumstances it is clear that if, in consequence of any unforeseen event, holders of notes were to come to have these changed for coin, the bank would be unable to do so. But, if it has reason to fear any such danger, its only step is to stop all discounting for the future. The actual way in which matters are done is as follows: As the bills of exchange, which it holds, successively fall due, it is bound to receive a sum of £40,000,000, coming in day by day from that moment, till ninety days hence at the latest. After that time what will be its position? If these £40,000,000 have been paid in coin, its reserve in coin will

[1] It is, of course, to be remembered that advances may be made without notes being issued, and therefore may be stopped without notes being called in. See Professor Dunbar on "Deposits as Currency," *Harvard Quarterly Journal of Economics*, July, 1887, and the paper by Mr. Inglis Palgrave on "Note-circulation" read to the Manchester Statistical Society, March, 1887. — J. B.

then be £80,000,000, or the very figure of its notes. In that case it will have nothing to fear. If the £40,000,000 have been paid in notes, then its notes in circulation will be only £40,000,000, the precise amount of its reserve. In that case, too, it need have no apprehensions. If the £40,000,000 have been paid half in coin and half in notes, then its reserve will have been increased to £60,000,000, and its notes in circulation reduced to £60,000,000. Again there would be nothing to fear, and the same with all other conceivable combinations.

Nevertheless, this complete stoppage of all advances and of all discounting would be too radical a measure. On the one hand, by suppressing all credit it would cause a terrible crisis in the country; on the other hand, it would damage the bank itself, by putting an end to its operations and sharing its profits. But the bank could bring about the same result, though in smaller proportions, by merely restricting the amount of its advances and of its discountings; for that, it is enough either to *raise the rate of discount*, or to be more diffident as to accepting paper presented to be discounted, by refusing paper which falls due at too remote a date or the signature on which does not appear to be sufficiently reliable.

It is scarcely necessary to say that this measure is not highly agreeable to the business public, and this disagreeable feeling is heightened by the fact that the step being taken just at the moment when there is need of coin, money is rendered more difficult to obtain. Nay, the bank may often be accused of having provoked a crisis, and such a complaint may be well founded. It is certainly a heroic remedy, but in spite of that it is certainly the step that best suits the situation, and a prudent bank should not hesitate to resort to it to defend its reserve. It is called "turning the screw." Its efficacy has been fully shown by experience.

Not only is it beneficial to the bank, by warding off the blow which menaces it, but it is also salutary to the country, by favorably modifying its economic situation.

Take a country which is obliged to make considerable remit-

tances abroad. The rise in the rate of discount, effected at the fitting time, reverses its position, by rendering it the creditor of the foreigner for large sums, and consequently provokes an influx of gold from abroad, or at any rate prevents the efflux of the country's money. This is how matters pass: —

The first result of the rise of the rate of discount is a *depreciation of all commercial paper*. The same bill of exchange for £1000, which was negotiated for £970 when discount was 3 per cent, will, now that the rate of discount is 7 per cent, be negotiated for only £930; that is, a depreciation of more than 4 per cent. Henceforward bankers of all countries, those who practise *arbitrage*, will not be slow in coming to purchase this paper in France, since it is cheap, and they will thus become debtors of France for the sum total of the moneys they have devoted to these purchases.

The second result is *the depreciation of all stock exchange securities*. Every financier knows that the stock exchange is greatly affected by the rate of discount, and that a rise in discount nearly always entails a fall in stocks; for stock exchange securities (especially those that are called international, because they are quoted on the principal European exchanges) do duty for commercial paper, and therefore share its fate. If you have a payment to make in London, the simplest thing to do is to obtain commercial paper payable in London, but, that failing, you can equally well make use of Italian Debt coupons, Lombard Railway debentures, Ottoman Bank bonds, etc., which are also payable in London. Business men who cannot turn their commercial paper into cash, or can only do so at a heavy loss, try to obtain ready money by selling their stock. But just as the fall in the value of paper incites demands from foreign bankers, so, too, a fall in stock exchange securities causes numerous purchases by foreign capitalists, and under this head the country in question, say France, again becomes the creditor of the foreigner for the large sums spent in these purchases.

Finally, if the rise in discount is great and sufficiently prolonged,

it will bring about a third result, *a fall in the prices of commodities*. Business men who are in need of money begin by procuring it through negotiating their commercial paper. That resource failing or becoming too expensive, they turn to all the stocks they have in their desks (that is to say, if they have any), and finally, if they are at the end of their tether, to obtain money they must realize, *i.e.* sell the goods they have in stock; hence a general fall in prices. But this fall produces the same effect as the preceding falls, and on a larger scale; *i.e.* it incites purchases by the foreigner, and consequently increases the exports of France, and therefore makes her the creditor of the foreigner.

We may sum up all these effects by saying that the raising of the rate of discount creates *an artificial scarcity of money*. We call it artificial, but it matches a reality, or at least an eventuality which tends to become realized, viz. the flight of coin to foreign parts. The disease is cured on homœopathic principles, *similia similibus*. This scarcity of money may cause a general fall in all stock, — an evil, no doubt, — but it also provokes, as a consequence, considerable demands from abroad, and hence, remittances of money therefrom, which is a benefit, and the very remedy that suits the situation.

XI. Some Special Forms of Credit.

There are three of these, in particular, which have been the objects of innumerable studies, and which have given rise to various institutions, *i.e.* Land Banks, Agricultural Banks, and People's Banks.

1. "Credit Foncier."

In order to become productive, present-day agriculture needs larger and larger capital; but landed proprietors do not always possess such capital and, through this lack, they do not draw from their land all the profit that they should. It would therefore be highly desirable, both in their interests and in the interests of the community, that they should be able to find the capital necessary

for drawing the full value from their land. This they should obtain from the *credit foncier* ("Landed Credit" or "Land Banks"), which, if well organized, ought to furnish the desired capital.

The simplest and most ancient form of credit on land is the loan on mortgage. From the lender's point of view, it presents a great advantage which has always made it much sought after by capitalists; viz. its almost absolute security, land being a pledge which can neither perish nor be stolen. The sum total of mortgages on land in the whole of France is reckoned to amount to between £520,000,000 and £560,000,000 sterling, or 15 or 16 per cent of the total value of all the landed property in France. In some countries the two amounts are almost equal.

However, to counterbalance this advantage, the mortgage system has great disadvantages for both of the parties; for the borrower, because he is burdened with excessively high charges, the rate of interest being rarely less than 5 per cent, whilst the income derived from agricultural improvements is often inferior to this rate; for the lender, also, because although loan on mortgage gives him full security for his money, it does not enable him to recover it easily. It is no simple matter to find any one to take up his claim, and even when the term has expired, he is too often obliged to resort to a measure which is as disagreeable for the creditor as it is lamentable for the debtor; viz. eviction.

To remedy this disadvantage a proposal has been made to render mortgage credits negotiable by means of endorsement, just as commercial claims and bills; and this system, which has been sometimes incorrectly called *mobilization of landed property*, has been ingeniously organized in some countries. Thus in Germany the proprietor can of himself lay on his land mortgages which he negotiates according to his requirements, just as a banker who draws checks on his own account. In Australia, under the working of the Torrens Act, mortgages can be just as easily transferred. For further details, see M. Challamel *On the Modes of Mobilizing Landed Property*, M. Worms, etc.

It must be observed that this remedy only affects the creditor,

and does not improve the position of the debtor, *i.e.* the proprietor. Further, it is exceedingly doubtful, as regards the mortgage-holding creditor himself, whether any system, however ingenious it may be, would allow him to negotiate this claim as if it were a commercial bill: that is contrary to the nature of things. A claim on mortgages will always participate to a certain degree in the nature of the land on which it is a lien.

Another still more ingenious system consists in the institution of banks of a special nature, which are usually called "Land Banks" (Sociétés du Credit Foncier). These play the part of middlemen between capitalists and proprietors; they borrow money from the former to lend it to the latter, and, although, as is obvious, they do not perform this service for nothing, yet they offer certain important advantages for both parties. To the capitalist they supply claims which are solid as mortgage claims, inasmuch as they have the same guarantee, which can be far more easily negotiated, since the pledge is not such and such a particular piece of land, but the whole body of the funds of the society. For it is the society itself, *i.e.* usually speaking a powerful company, which issues the credit papers, and they circulate as readily as certificates of government stock or as shares or debentures in railway companies. To land proprietors they afford a triple advantage: *firstly*, a loan payable at a distant date, for example seventy-five years; *secondly*, a reimbursement which is effected little by little and in an almost imperceptible manner by way of *annuity;* and *thirdly*, usually by a relatively moderate rate of interest.

In France there is only one society of this kind, and it has maintained a monopoly since 1852, under the name of the "Credit Foncier de France." This great corporation lends for a period of seventy-five years. The interest is not much less than 5 per cent, but this rate comprises an annuity, which is calculated to redeem the capital within a period of seventy-five years, so that at the expiration of the term the landed proprietor is freed of all debt, having, meanwhile, paid a smaller interest than would have

been asked by an ordinary creditor. In spite of these ingenious combinations, the "Credit Foncier" has not been able to render very great services to agriculture; the sum-total of the capital lent by it arises, indeed, to the imposing figure of nearly £120,000,000 sterling, but the greater part of this has been employed in building, and hardly a quarter has gone to country property.

Without professing to lay down a general principle, we do not think that it is highly desirable to make the means of borrowing easier either for the small or for the large landowner: such a facility might bring him luck once, but might ruin him ten times oftener. Following an inverse tendency, we should be inclined rather to demand the adoption of certain measures, such as the *Homestead Laws* in the United States, which, by preventing a landowner from borrowing, insure to him and his family the safe possession of his land.

In virtue of this law, every American proprietor who cultivates his land himself, can declare exempt from seizure his house, together with a certain extent of land round it, this varying according to the particular laws of the respective States. Sometimes, too, this exemption is not optional and is obligatory, and it appears to us that it can only be efficacious under the latter circumstance. Of course the proprietor is debarred from finding credit, at any rate within the limits of his homestead. A proposal has recently been made to introduce this law into England and into France; its aim is easy to understand, viz. the conservation of the family hearth, and the continuance of small proprietorship.[1]

2. Agricultural Credit.

At first sight agricultural credit seems closely to resemble landed credit, for the object of both is to supply funds to landowners. Still, it differs from the latter in a clear enough way, — in its economic aims, its legal character, and the form of the institutions which represent it.

[1] The followers of Le Play are probably in view. — J. B.

Its aim is to obtain for landowners, not precisely the capital which is necessary for their starting expenses, but the floating capital which is required for the working expenses of cultivation. For it is in the nature of the agricultural industry only to give returns at the end of the year, or sometimes less often, while the expenses last throughout the year. The agriculturist, therefore, continually needs advances, and it is these advances that agricultural credit can supply.

Its guaranties are not the land itself, as is the case with Landed Credit, but the working stock; its only pledges are the raw material, the cattle, and the crops when once they have been got in; to speak legally, it is a loan on *movable* and not on immovable property.

In Germany and in Italy, agricultural credit is organized under the form of *Mutual Loan Societies*, between landowners who make loans one with another, and thus avail themselves of the credit given them by this association to obtain loans from third parties on advantageous terms. The most famous of these societies are what are known as *Raiffeisen Banks*,[1] and are of somewhat recent date; their characteristic features are: *firstly*, that the members contribute no share to the society — it is therefore formed without capital; *secondly*, they receive no profits; *thirdly*, they are all jointly responsible on the security of all their effects.

In France, however, agricultural credit is represented by no special institution, though such have frequently been talked of; in truth, there are none, and we only partially regret this lack.

3. People's Banks.

The well-known proverb, "Only the rich receive loans," is easily verified every day. Yet the poor also may have need of credit even more than the rich. But how can they obtain it?

The problem is most easily solved by means of association. An isolated laborer or an artisan, however honest and laborious

[1] See English Blue Book on the "System of Co-operation in Foreign Countries." (*Commercial*, No. 20, 1886) pp. 36 and 63. — J. B.

Bldg loan societies

we may suppose him to be, cannot offer a lender a substantial guarantee, for want of work, or death may at any moment defeat the best intentions. But if these workmen or artisans are 10, 100, or 1000 in number, then being united in a sheaf, and bound together by the constraining bond of a joint obligation, they will present a broader surface, and can easily obtain credit without resorting to the tender mercies of usurers. Besides, their individual contributions, however small they be, from their very number constitute a substantial enough common fund which they can lend to one another.

It is especially in Germany, under the inspiration of Schulze Delitzsch, a man whose name will always be attached to this institution, that these *people's banks*, otherwise called *co-operative loan societies*, have undergone an extraordinary development. More than 2000 of these banks are reckoned to exist in Germany, but there are no more than about 900 (the most important, it is true) the results of which are known. In 1887 they had a capital of their own of more than £6,600,000 sterling, and a borrowed capital of £20,520,000. Thus they could operate with a total capital of £27,000,000 to £28,000,000. They borrowed at 3.81 per cent; they lent to their own members at 5.5 per cent, and also shared amongst them, in the shape of dividends, the profits thus realized.

In France, however, in spite of several brilliant attempts (in particular the "people's banks" founded by Father Ludovic de Besse), this institution has never succeeded. Once more we find an easy consolation. Certainly such an institution may render some services to a particular class of society, such as small artisans and small shopkeepers; all those, indeed, who work on their own account. But it has not great possibilities as regards the wage-receiving laborers, *i.e.* the bulk of the working classes; therefore the name "popular" credit is not particularly well chosen. Usually, when workmen resort to credit, it is to consume, not to produce wealth; what would they do with capital, since they are not called upon to work on their own account? At the most, a few

of them might be enabled to obtain the advances necessary for rising from being wage-receivers to the position of small employers. This is clearly shown by the example of the German credit societies. Among their members, workmen, properly so-called, are only in the proportion of about 8 per cent; small working artisans, traders, and shop-keepers amount to 57 per cent; small farmers, to 27 per cent; the rest are clerks, domestic servants, and people of small but independent means.

THE QUESTION OF MONOPOLY OR OF LIBERTY OF BANKING.

The question before us is, ought the legislator to interfere in the organization of banks, especially as regards the issuing of notes, and if he does so, within what limits and in what manner?

We may consider this under two aspects, or rather, the question becomes subdivided into two questions: —

Firstly. Ought the legislator to reserve for one bank alone the privilege of issuing notes, or should the right be thrown open to all who care to use it? This is the question of *monopoly versus competition.*

Secondly. Ought the legislator to allow banks (whether one or several matters nothing) to issue notes *ad libitum*, or should this right be submitted to certain restrictions? This is the question of what is called the *currency principle versus* the *banking principle.*

I. On Monopoly or Competition in the Issuing of Notes.

Both systems and all the intermediate systems are in use in various countries.

In France, monopoly is the rule. Every one knows the great establishment which bears the name of the Bank of France, and is aware that it alone has the right of issuing bank notes.

A digression on the Bank of France may be not uninteresting.

The Bank of France was founded by Napoleon while he was yet First Consul. It was actually founded in 1800, but its privilege of issuing notes dates only from 1803. Even then it could only exercise that privilege in Paris and in towns where it had established branches; and consequently other banks in the chief provincial towns received the same privilege. But from the Revolution of 1848, when these departmental banks were merged in the Bank of France, it has enjoyed the exclusive privilege, which has already been several times renewed for periods of thirty years, and expires in 1897. According to a bill proposed by the government, the monopoly is to be again renewed till 1920.

However, the Bank of France is by no means a government institution. It is a joint-stock company, like any other company; but instead of being merely administered by its shareholders, it has a governor and a deputy-governor, who are nominated by the State. In exchange for its privilege of issuing notes it is subjected to certain special obligations.

Firstly. It is only permitted to discount bills of exchange bearing three signatures, and drawn for ninety days after date at the latest.

Secondly. It is not allowed to give interest on its deposits.

Thirdly. It can make advances on stocks and securities, or on bullion; but it is not allowed to be "uncovered" in its running accounts with its customers, except with the government. To the latter, on the other hand, it is obliged to make large advances.

Fourthly. It cannot issue notes to a larger amount than 3,500,000,000 francs.

These obligations do not seem to be imperatively necessary, and they might probably be done away with without serious inconvenience. On the other hand, there is one obligation that might very well be laid upon it: the bank should have to share its profits with the State, above a certain fixed limit. This clause requiring sharing of profits is already inserted in the charters of French railway companies; it holds good for the Belgian and German

banks. For it is just that every privilege should be paid for; and no happier means of payment could be found than that the State, *i.e.* society as a whole, should share the profits accruing from that privilege. According to the bill referred to above, the bank will have to pay the government yearly a fixed sum of £100,000.

To return to the banking systems in vogue in various countries. Contrary to the example of France, the United States adopts the method of competition. Every bank can issue notes, provided that it complies with certain conditions presently to be enumerated. As a matter of fact, there are upwards of 2,000 banks that exercise this right.

In England the system is a mixed one, and is somewhat complicated. The Bank of England has no exclusive privilege for the issuing of its notes, save in London, for there are several hundred provincial banks which also issue notes. Still, the system is not one of free competition, for the number of note-issuing banks is definitely limited. Those alone can enjoy the privilege which already exercised the right in 1844, the date of a famous law as to the organization of banks, which established the present situation, and was due to the initiative of Sir Robert Peel. Moreover, these private banks are not immortal; for they are destined to disappear one day or other, and thenceforward the Bank of England will possess the monopoly, *de facto* as well as *de jure*. Indeed, the number of provincial banks which issue notes has greatly diminished since 1844.

It is impossible in this place to pass under review the organization of banks in all countries; the reader is referred for further details to the works of Walter Bagehot, Mr. Goschen, and Sir John Lubbock.

Now, which are we to prefer of all these systems? The principal argument advanced in favor of competition is the classic argument that monopoly produces dearness, whilst competition causes cheapness. If the Bank of France had not the privilege, so it is said, the rate of discount would be lower, and the advan-

tages to be drawn from credit by commerce and industry would consequently be considerably greater.

It may be replied to this, that it is by no means proved that competition necessarily means cheapness, or monopoly dearness. To that economic principle there are numerous exceptions, even in the production of certain commodities, and in this particular case the principle is of very doubtful application. For experience does not appear to show that where there is a multiplicity of banks discount is lowest.

Moreover, we might reply that the argument here advanced is beside the question; for the subject of monopoly or competition is not here discussed with regard to banks in general, nor, in particular, to discount. No one denies the right of every bank to discount; not only is competition here *de jure*, but it exists *de facto* in every country, even in France. Not only private banks, but powerful companies with immense capital, compete with the Bank of France in discounting as well as in every other banking operation. Thus for the last eight years the rate of discount of the Bank of France has rarely exceeded three per cent, which is below that of the Bank of England.

We are here only concerned with the question of *the issuing of notes*. Now, in this question commerce as a whole is far less interested than is the general public, and the only system to be preferred is that which offers most guarantees to the public, *i.e.* which gives most stability to the value of the bank note. In the eyes of the public the bank note is merely money. Now, when we speak of the issuing of money, no one clamors for free competition. The State reserves to itself the right of coinage; if the State does not exercise this right, too, as regards the bank notes, it is perfectly justified in delegating it in some fashion or other to a single establishment which possesses its own and public confidence.

Regarded from this point of view the Bank of France note has proved its mettle. For ninety years past, even in the most dangerous crises, it has never fallen below par. There is, therefore,

for France at least, no serious reason whatever to hand over to free competition the issuing of bank notes, and the recent renewal of the privilege raised scarcely any opposition.

Further, even granting that a multiplicity of banks does not always involve a depreciation of the notes, still it causes a highly inconvenient diversity of moneys, unless recourse is had to a sort of syndicate, as in Switzerland, or unless the State requires a uniform type of note, as in the United States. On the other hand, there is reason to hope that, with a small number of great national banks, we might perhaps arrive at an *international bank note, possessing currency in all countries*, which would be the realization of a long-sought ideal, an universal money.

II. As to Liberty or Regulation in the Issuing of Notes.

Whatever opinion we may adopt as to the question of monopoly or competition, a further question remains: Ought the issuing of notes by these banks (whether one or many) to be left free, or ought it to be regulated?

But, first of all, is it within the power of the legislator to insure the payment of bank notes, and is there any system of regulation which can guarantee it?

Three plans have been suggested, and all of them have been tried in different countries.

Firstly. The first consists in requiring *a certain proportion between the sum total of the reserve and the amount of notes in circulation*. This is what is called the *currency principle*, the principle of regulated circulation, in opposition to the banking principle, or principle of the liberty of banks, which we will investigate presently.

This is the régime that was laid on the Bank of England by the famous Act of 1844. According to the terms of this law, the bank can only issue notes up to the total of the cumulative amount of its reserve and of its capital. As this capital is £16,200,000 sterling, this means to say that the sum of notes issued can never

exceed the amount of the reserve by more than £16,000,000 odd.

To insure the better observation of this regulation, the Bank of England is divided into two distinct departments, one charged with banking operations, deposits, and discount, which cannot issue any notes, and the other entrusted with the issuing of notes, which can transact no banking business. The latter hands over its notes to the other department according to requirements, but when it has delivered over notes to the value of £16,000,000 odd, it can henceforward only deliver notes in exchange for specie or bullion.

Evidently this limitation could be not regarded as offering any really substantial guarantee in the case of any other bank than the Bank of England, for the capital of a bank is not always immediately capable of realization, and in this case in particular we may say that the guarantee is purely fictitious. In fact, it is represented (at any rate, up to the sum of £11,000,000) by a mere claim upon the State, so that the £16,000,000 worth of notes, which can be issued above the amount of the reserve, are only a kind of paper money.

Further, in practice, and precisely in times of crisis, this limitation has been found to be so seriously inconvenient that already on three separate occasions it has been necessary to suspend the law, and to allow the bank to exceed the fatal limit. It is easy to understand that, if the bank happens to have £20,000,000 of reserve, and £36,000,000 of notes in circulation, it will be obliged to refuse all discount. For with what could it discount the bills presented to it? With notes? But the limit of £16,000,000 is already reached. With the cash it has in reserve? But if it reduces its reserve to £19,999,999, as the circulation of notes still stands at £36,000,000, the law will be equally violated. However, the Bank of England cannot refuse discount without involving the bankruptcy of half the business men of England. The legislator, therefore, hastens, in these circumstances, to step in to remove the barrier he himself has raised.

An analogous system has been applied in certain countries. Others have preferred to establish a fixed ratio, generally the ratio of a third, between the amount of the reserve and the value of the notes issued. The disadvantages are the same, and perhaps even greater. It is easy to prove that, with the fixed ratio of a third, not only discount, but even the payment of notes, may at any given moment be rendered impossible. Let there be £4,000,000 of reserve and £12,000,000 of issued notes. Evidently the bank cannot cash one note without causing the reserve to fall below the third of the sum total of the notes, for £3,999,999 is not exactly the third of £12,000,000. Thus the danger to be exorcised is actually brought to pass.

Secondly. The second plan is simply to fix a *maximum of issue.* Without doubt this system is more elastic than the preceding one, and, as will be seen below (page 319), it has been resorted to in France since 1870. Its inconveniences, therefore, are less; but it must be confessed that it offers very few guarantees, for what does it matter that the bank can issue only a limited number of notes, if it can reduce its reserve to zero? How, then, is the public safeguarded?

Thirdly. The third method is to compel banks *to guarantee the notes they issue by securities* — usually certificates of government stock — which are at least equal in value to the notes. This is the system used in the United States. Each bank, in return for the notes it wishes to issue (and these, by the way, are handed over to it by the State, for the bank itself is not permitted to fabricate notes), must deposit as a guarantee certificates of government bonds, of a higher value than the notes by one-tenth.

This system is useful for strengthening the credit of a bank in normal times, but at critical epochs, just when the remedy should be the most necessary, it is worthless. For under such circumstances all stock, government securities included,[1] are naturally depreciated in value; and if, to satisfy demands for the payment of notes, the

[1] General Francis A. Walker remarks that the statement is not correct, if applied to the United States.

banks were obliged to realize the enormous amount of stock held as security, they would fail to succeed. Such an operation would only ruin the credit of the State, without raising that of the banks.

It can thus be seen that, taking all in all, no one of the systems hitherto conceived can guarantee the payment of notes. The only efficacious method would be to oblige banks always to keep a reserve equal, not only to the total value of their notes in circulation, but also to the amount of their deposits. Then, indeed, the guarantee would be perfect; but then, alas! banks would be of no further use, except to avoid the accidental losses or the wear and tear of coin, which would be a very minute utility. They would no longer utilize the floating capital of the country, for they would confine themselves to uselessly heaping it up in their cellars. They would no longer serve to economize money, for the bank note would henceforth have but a representative character. Finally, they would no longer be credit institutions. If we wish to use credit, we must resign ourselves to its disadvantages. It is a mere attempt at the squaring of the circle, to seek to combine at one and the same time the advantages of credit and of ready money, for the two are mutually exclusive.

Must we, then, seeing that all regulation appears to be useless, if it be not irksome or dangerous, adopt the principle of *laissez faire*, and permit banks to issue notes after their own fashion and without control? Many writers do claim this liberty for banks, and their reasons are not without weight.

The essential argument is, that there would never be grounds to fear an excessive issuing of notes. For, say they, the danger is chimerical; the ordinary working of economic laws will restrain this issuing within due limits, even if the banks wished to overstep them, and the reasons for this are as follow: —

Firstly. In the first place, bank notes are only issued in the course of banking operations; that is to say, by discounts or by advances on bills. For a bank note, then, to enter into circulation, it is not sufficient for the bank to desire this entry; there must also be some one who is disposed to borrow. Issues, therefore, are regulated by the needs of the public, and not by the

desires of bankers. The amount of notes issued by the bank will depend upon the number of bills presented for discounting,[1] and the amount of these bills will depend on the state of business transactions.

Secondly. Bank notes only enter into circulation for a short time; a few weeks after issue, they return to the bank. We might say of them, in the words of Corneille, —

"Le *flux* les apporta, le *reflux* les remporte."

Take a £100 note which is issued in exchange for a bill of exchange; in forty or fifty days, or ninety at the outside, when the bank is able to cash the bill of exchange, the £100 note will return to it. Probably it will not be the same note, but what does that matter? It returns for the same amount as it was issued for.

Thirdly. Even granting that the bank may issue an excessive quantity of notes, still it will be impossible for it to keep them in circulation; for if the note is issued in superabundant quantity, it will necessarily be depreciated; as soon as it becomes depreciated, however slightly, the holders of notes will hasten to bring them to the bank to demand their payment. It will be useless, then, for the bank to attempt to inundate the public with notes; it will fail in its endeavors, being in its turn flooded with the notes.

These considerations certainly contain part of the truth, and experience has confirmed them on more than one occasion. Banks have never succeeded in forcing into circulation more notes than the public needs required.

Still, we must not disguise the fact that absolute freedom of issuing may entail grave dangers, in times of crisis, if not at normal times. Now crises are very frequent occurrences in the economic life of modern societies.

No doubt it is true that in theory the amount of notes issued depends on the demand of the public, and not on the will of the banks. But observe, that if one bank alone seeks to attract cus-

[1] But see note above, page 300 [on fact that advances need not be of notes]. — J. B.

tomers and to compete with its rivals, it can always, by sufficiently lowering the rate of discount, succeed in largely increasing the extent of its operations, and consequently, also, of its issues. It is likewise true that the notes issued in excessive quantity by this imprudent bank will return to it for payment as soon as they become depreciated. But observe that this depreciation does not make itself felt immediately. It will only be at the end of a few days, perhaps a few weeks; and, if, during this interval, the bank has issued an excessive quantity of notes, the day on which they return will be too late for it. It will no longer be able to pay them, and will be submerged under that ebb tide of circulation of which we just spoke. Certainly the bank will be the first to be punished for its imprudence, by failing. But how does that help us? Our business here is to ward off the crisis, and not to punish its authors.

It is on this point that we find an argument for monopoly. There is reason to believe that a bank holding an eminent position in a country, and rendered strong by its history and by its traditions, will carry into the matter of the issuing of notes all the prudence that is desirable, and this of itself is the only really efficacious guarantee. Besides, experience confirms this way of regarding the matter in the case of all the great banks, and especially of the Bank of France; for the latter, during its ninety years of existence, has allowed only one reproach to be brought against it — that of an excessive prudence — which has deprived its functions of part of their utility. At certain times the amount of its reserve has actually exceeded the value of the notes issued. Usually the issue of notes is greater than the amount of the reserve by not quite a fourth. Thus the balance of 1890 shows 2,850,000,000 francs of notes in circulation, as against 2,481,000,000 francs of coin in reserve, or £114,000,000 as against £90,000,000 sterling. Now the Bank of France has never been subjected to any regulation, so far as concerns the issuing of notes; but for a short time past a maximum issue has been established of £140,000,000 sterling, — by the new bill this is to be raised to

£160,000,000. Still, as was said above, this maximum is of very recent date. It did not exist in the statutes of the bank, and was only introduced by surprise, we might say, in the Law on Finance of 1883. It formerly obtained only in the case of forced currency. Again, this limit of a maximum is a precautionary measure, taken far less against the bank than against the State. It was not dictated by the fear of the bank abandoning itself to excessive issues, but by the fear of the government demanding from it excessive advances.

Inversely, in the United States, where reigns the system of free competition, the legislator multiplies regulations on the right of issue. Not only must the banks, as we observed above, give as a pledge for the notes they issue a higher value of government securities, but they must also show that they possess a certain capital; they must keep in their safes in coin at least 15 per cent of the deposits confided to them; they must always leave a certain sum in coin in the public treasury, etc., etc.

To sum up, we must choose between these two systems — either monopoly, with the most perfect freedom as regards the issue of notes, or competition, with severe regulations as to issues. In either case we must sacrifice some freedom, and, in our opinion, there is less to suffer from the first system than there is from the second.

Part III. — The Equilibrium between Production and Consumption.

CHAPTER I.

INSUFFICIENCY IN PRODUCTION.

I. The Increase of Population; the Laws of Malthus.

Will production be always sufficient for the wants of man? That is a problem which never ceases to be disquieting.

We must consider that, on the one hand, the number of men constantly multiplies in virtue of the physiological laws of population; and that, on the other hand, the needs of each man increase even more rapidly, perhaps, in virtue of the psychological laws we have already analyzed. Human industry, then, has always to satisfy this double progression; that is to say, to furnish a share of wealth which must ever be larger for each sharer therein, whilst the number of those who are sharers is ceaselessly augmented. Will human industry always be able to satisfy these demands?

We know that Malthus, in his famous formula, affirmed that "population tends to increase in a geometrical progression, whilst the means of subsistence can only increase in an arithmetical progression" at the best.

He expressed this double law in this double formula, which he only intended to serve to illustrate his argument, and which has been wrongly taken literally: —

Progression of population, 1, 2, 4, 8, 16, 32, 64, 128, 256 . . .
Progression of production, 1, 2, 3, 4, 5, 6, 7, 8, 9 . . .

Malthus calculated at twenty-five years the period of time which would on the average elapse between two consecutive terms of these progressions. Thence he concluded that "at the end of two centuries, the population would be to the means of subsistence as 256 are to 9; at the end of three centuries, as 4906 to 13; and after 2000 years, the difference would be immense, and almost incalculable."

Thus, far from hoping that production would increase equally with consumption, he asserted that production would always remain behind, and far behind. His conclusion was that the equilibrium could only be re-established by a kind of systematic shearing down of the human species, effected by means of wars, epidemics, famines, misery, and other similar scourges, which appeared to him in the light of actual providential laws.[1] Still, he dared to hope that in the future men would have the wisdom to forestall the action of these scourges and render them useless, by themselves limiting of their own free will the increase of population. Malthus advised them, for this purpose, to practise *moral restraint;* that is to say, to marry as little as possible; at any rate, as late as possible; or at the very least, only to add to their families within the limits of their own individual resources.

Although this doctrine of "moral restraint" may have highly immoral consequences, yet, in the way in which its author understood it, it perfectly deserved the epithet of "moral"; and it would, therefore, be unjust to render Malthus responsible for the practices by which some of his disciples have sullied his doctrine and his name.[2]

In order, then, to maintain the equilibrium between the means of subsistence and the number of mouths to feed, he counted far less on the increase of production than on the limitation of population.

[1] In the sense in which the consequences of our own actions, good and bad respectively, follow from these actions by laws which are as truly ordered by Providence as is the sequence of effects from any other causes. — J. B.

[2] No doubt, as in the case of Robert Dale Owen, with the best intentions. — J. B.

Nearly a century has passed since the publication of this doctrine; and, up to the present, experience has failed to justify the pessimistic forecastings of Malthus. In certain countries, in spite of a rapid development of population, we have witnessed the production of wealth developing even more rapidly. Still, it is perhaps too early for us to reassure ourselves; and the fatal law yet remains ever suspended, at any rate, in a menacing position, over the heads of the human species.

The rate of increase of population in civilized countries may be reckoned as about 1 per cent (more exactly, 9 out of 1000), which corresponds to a period of doubling in 72 years, and is thus far inferior to that predicted by Malthus.[1] Thus, the yearly increase for Germany, England, and Russia is respectively 9, 10, and 13 per 1000; but it is less for some countries, especially for France, which is far in the rear. In this respect France is far too faithful to the doctrines of Malthus, for its yearly increase is but 2 for every 1000.[2]

On the other hand, some countries show an infinitely more rapid progression. For a century past the population of the United States has doubled in every 25 years, and that of the Australian Colonies in less than 10 years; the population of the United States was 4,000,000 in 1790, and about 62,480,000 in 1890; the population of New South Wales and Victoria was 29,800 in 1821, when they formed but one colony, and in 1888 was more than 2,000,000. But this enormous increase has been due to immigration far more than to the excess of births over deaths, and consequently is beside the question.

Yet, even at this apparently moderate rate of 1 per cent, the increase in population would be literally awful, and would lead to almost inconceivable results. Granting that the population of the world, which is now calculated to be 1,500,000,000, were to increase 1 per cent per annum, it would reach 3,000,000,000 by the middle

[1] Malthus asserted *tendencies;* but he made no positive predictions. — J. B.

[2] See Dr. Longstaff's *Studies in Statistics* (London, 1891), especially chapters V. and VI. — J. B.

of the next century, and 48,000,000,000 about the year 2240; that is to say, in only 360 years. A little further prolongation of the progression would show that in about 800 years the whole earth would be as thickly populated as the environs of Paris, and that in 1200 years, which is really a short period in the history of the world, there would have to be one man for each square yard, which would not leave them room to live in or to move in!

No doubt it is perfectly certain that such results will not come to pass, but what causes will prevent them? To know them would be to know the law of population, and we must confess that we are ignorant of that. However, biology has supplied us with a solution, which, if proved, will be found to be a new contribution of that sister science. As the *fertility of any species* appears usually to vary in inverse ratio to the *development of the individuals* of the species (for the lower species increase in infinitely larger proportions than do the higher animals, and man in particular), — as in the human species itself the lower classes have generally more children than the picked classes, — and further, as there appears to be a physiological law which would seem to establish an antagonism between generative activity and cerebral activity, we may hope that the fecundity of the human species is destined to slacken progressively in proportion to the intellectual and moral development of the individuals that compose it. (See Herbert Spencer's *Biology*, and *The Evolution of Sex*, by Professor Patrick Geddes.)

II. On the Limitation of Production in Agriculture, and the Law of Decreasing Returns.

We have seen how threatening can be the increase in consumption; let us now consider what we can hope from increase in production. We are aware that Malthus admitted that the means of subsistence could increase in an arithmetical progression; but that is far too favorable a supposition. At present France produces about 100,000,000 hectolitres of wheat. Seventy years ago, in 1820, the production was 50,000,000. Seventy years hence the

yield may perhaps be 150,000,000. But how can we be persuaded into believing that there will be a similar increase for each future period of seventy years? The supposition is altogether inadmissible. Moreover, the doubling of the production between 1820 and the present day arises from two causes: the area of land sown with wheat has increased, and at the same time the yield per acre has been augmented.

The production of a piece of land of given area is of course not unlimited. Not only does it not lie with the cultivator to increase indefinitely the elements capable of assimilation that the soil contains, but further, could he even, like the gardener with his pots, make altogether new an artificial plot of ground, it would not be within his power to cause an indefinite number of ears to grow upon a given area, or to give to each ear an indefinite number of grains, or to hasten by one hour the time appointed for their coming to maturity. Vainly would it be replied, that by manuring or by more deeply ploughing the subsoil he can indefinitely enrich his plot. The depth of the stratum of earth in which the roots of plants can find nourishment is strictly limited, and so, too, is the quantity of natural and even of artificial manures that agriculture can employ. Indeed, some of the most indispensable, such as the phosphates, may be regarded as rare.

Thus his power is absolutely limited by the biological laws which in a sovereign manner determine the constitution and the evolution of all living beings. Every creature, be it animal or plant, requires a certain space whence to obtain nourishment, and a certain time for its development; and these two conditions are enough to shackle agricultural industry by a chain which manufacturing industry has in a measure shaken off.

Still everything induces us to believe that the limit is yet very far distant, for certainly the most improved agriculture of the present day does not utilize more than a minute portion of the raw materials and natural forces that exist on a given area of land. If the steam engine is still so imperfect that, according to the calculations of engineers, it uses only 7 or 8 per cent of the heat gener-

ated by the combustion of coal, that machine which is called a potato field, a pasture land, a corn field, is defective in a radically different way; and if agricultural science were as skilled as the science of mechanics in determining the theoretical returns, we might doubtless prove that the actual yield is not the hundredth part of what might theoretically be produced.

The agriculturist can always, if he likes, increase the returns of the soil; but after having passed a certain stage in agriculture he can only do so at *the price of a labor which constantly increases*, so that a moment arrives when the effort required to increase the returns would be disproportionate to the result.

Take an acre of land producing 20 bushels of corn, which is about the average for France. Let us suppose that these 20 bushels of corn stand for 100 days' work, or, if it is preferred, for £5; the proposition means that to produce on this land twice the quantity of wheat, or 40 bushels, we must spend *more than 200* days' labor, or *more than £10* in expenses. To double the product it will perhaps be necessary to triple, quadruple, or even multiply by ten the labor and the expense. This is called the *law of decreasing returns* (*i.e.* not proportionate to the labor).

It is certainly confirmed by every-day experience. Question an intelligent farmer, and ask him whether his land could not produce more than it yields. He will reply, "No doubt it would. The crop of wheat would be larger, were I to use more manure, plough deeper, clear the ground of the minutest dandelion roots, employ manual labor to break up the soil, dibble in, if necessary, every grain of seed by hand, protect the crop against insects, against birds, against parasite plants." "Then why don't you do so?" "Because I should not recover my expenses; that addition to the yield would cost me more than it would be worth."

Thus in the production of any plot of land there is a point of equilibrium, which marks an impassable limit, not of course a limit which could not be passed if it were wished, but one that no one wishes to pass, because there is nothing to be gained by so doing.

If the case were otherwise, if there could be an indefinite in-

crease in the production of a piece of land of given area, provided that the labor and expense were proportionately increased, land-proprietors, surely, would not fail to avail themselves of it. Instead of extending their cultivated areas over a more or less large domain, they would restrict them to the smallest possible space: that would be far more convenient. But then the face of the earth would be utterly changed. The fact that matters do not pass in that fashion, and that we ceaselessly put under cultivation less fertile or less favorably situated plots, proves clearly enough that in practice we cannot expect more than a certain return from a particular piece of ground.

Yet it is important to make three observations on this law.

1 *Firstly*. This point of limitation is far from being generally reached, even in countries where cultivation is relatively advanced. Most landowners, either from routine or from want of capital, are still far below the limit, and in France there is assuredly a scarcity of agriculturists who could really hold the language attributed to them above; *i.e.* who would not find more profit in increasing their production. There are millions of acres, not only in France, but even in England or in China, where the profit could be more than doubled by doubling the capital, and to which, therefore, the law of non-proportionate returns fails to apply.

2 *Secondly*. This point of limitation is not invariable. It is determined by the state of knowledge at any given moment; but provided that agriculture progresses and changes its methods of cultivation, the limit is ceaselesly driven up. The very landowner who to-day finds no profit in producing more than twenty bushels the acre, because the additional crops would not be worth the additional labor, will find it profitable half a century hence, if by then the labor and expenses necessary for production have become lowered by the invention of more powerful agricultural machines, or by the discovery of more fertilizing and less dear manures. And, if some day there be no means of further developing the production of corn, corn may perhaps be replaced with profit by some other more prolific or more nutritious plant.

Now, kitchen-gardening turns the soil to far better effect; it multiplies vegetables far more rapidly than corn or cattle when grown on a large scale, and can consequently produce a far greater quantity of food-stuffs. It is probable, then, that this will be the agriculture of the future, and that in a few centuries the whole of Europe will be like the environs of Paris and of other great towns at the present day. Countries beyond the sea would then supply what is now supplied by the provinces; to wit, corn and meat, if indeed they are to be articles of consumption at that date. This kitchen-gardening requires nothing more than a great deal of manual labor and enough manure; now these double conditions are perfectly satisfied by the great density of the population. Thus by means of an artificial soil, by artificial heat produced in hot-houses, perhaps by artificial light furnished by electricity, food-giving products may be in some manner manufactured *de novo*.

3, *Thirdly.* Finally, even when the limit is reached by any particular country, if there be still certain regions of the globe which have not yet attained to that condition, the latter may supply the former with whatever they may lack, provided that the means of transport are sufficiently improved and that trade can work freely. Under these conditions, the law of non-proportionate returns will only be slightly felt by the most thickly peopled countries, for they will do what has already been practised by England, Belgium, and even France. Instead of trying to force the returns from their own territory, they will prefer to send for a part of, if need be all of, their means of subsistence, from still new countries which can produce food in superabundance. To be able to obtain this by exchange, they will only need to produce manufactured goods; and since, as we are on the point of seeing, the law of non-proportionate returns does not apply in the least to the manufacturing industry, the older countries will be able to obtain food-stuffs in as large quantities as they may wish.

Nevertheless this resource can be merely provisional, for in order to supply the deficiency in some countries there must be a surplus in others. Now, when these latter are in their turn equally

peopled, they will no longer have any excess of food to dispose of. All that we can say is, that, as these uncultivated or barely cultivated countries, which are the reserve fund of the future, still cover the larger part of the globe, our provisional resources will last for several centuries.

III. On the Limitation of Production in Other Industries.

There are some industries which are even worse off than agriculture; not only are we unable to *indefinitely increase* the production of these, but we cannot even hope to *maintain* their present production for an *indefinite* period. Among them rank the extractive industries. At present as much coal as one likes can be taken from the mine, but a time will come when there will be none left, and already England is calculating with dread the number of tons that remain for her to burn.

It is the same with other industries which are commonly classed as extractive, such as hunting, fishing, and the opening up of forests. The first of these, which holds so prominent a place in primitive societies, has now disappeared from the list of productive industries, at least in civilized countries, for the excellent reason, that in spite of the severe regulations in force, it has ceased to yield remunerative returns. Even in the deserts, even in the solitude of the Poles, the spoils of elephants, ostriches, beavers, otters, and whales are beginning to fail the explorers who seek them there. The exhaustion of the seas which bathe our shores is an endless source of lamentation for our sea-faring population, who are already obliged to fish on the high seas, and to provide stronger boats. Finally, the disappearance of forests, and consequently of working in wood, would already be a *fait accompli* in Europe were it not for legislative intervention.

Yet although this approximate exhaustion is the fate reserved for the extractive industries, we are able to delay it for a time by changing their methods of procedure. Instead of hunting the ostrich, we can rear it; instead of fishing, we can practise pisci-

culture; instead of clearing away forests, we can sow new plantations. In fine, we can transform these *extractive* industries into *agricultural* industries, though they will consequently be subjected to the same law as the latter.

There are other industries which are more favored than agriculture, and which completely escape the law of decreasing returns. The nature of the manufacturing, commercial, and transporting industries exempts them from the working of such a law. Not only have they no reason to fear that their expenses will increase in a higher proportion than their production, but, on the contrary, their general expenses decrease in direct ratio to the expansion of their output. Their fear is not of being able to supply the demands of consumers, but of producing over and above the requirements of consumption. Indeed, this is one of their greatest cares; for at the present day manufacturers are somewhat frequently obliged to concert together to restrict their output within certain limits, so as not to cause a glut in the market. Such agreements are called "Trusts."

As a proof that manufacturing industries are burdened by no law of limitation, we may adduce the example of English cotton spinners, who produce as many yards of cotton stuffs as would gird the terrestrial globe 120 times; 5,000,000,000, to be exact. Nothing would prevent them from making enough cotton goods to clothe the whole globe with, if only they were able to dispose of them. It is sometimes urged in objection that commercial or manufacturing industry is itself limited by the limitation of markets; for a manufacturer cannot always develop his production, and at the same time find new customers; a railway company which increases its communications too quickly is liable to a diminution in its profits. That is an extraordinary confusion of thought. Our question is, whether industry is able to constantly keep up with increases in the demand, and we are given cases in which production exceeds this demand!

There is, then, a complete contrast between the two great branches of production, and it is easily explained by the natural

difference between these two forms of human activity. The part played by the agriculturist is, so to speak, merely passive; he has to look on Nature doing her work according to laws that he scarcely knows, and which he cannot alter. He has to wait patiently for long months before the seed slumbering in the furrow is transformed into the ear, and long years before the acorn becomes the oak. The manufacturer, on the other hand, effects on matter transformations which are usually simple, and of which he at any rate knows the laws. His auxiliaries are housed and tamed, and work under his orders with the precision of automata. He is not bound in by the inexorable cycle of the seasons; day and night, summer and winter, his furnaces can glow and his looms can turn.

Yet it would be a mistake to imagine that the productive power of manufacture is altogether unlimited; first of all, as it can obviously only work on the material supplied it by the agricultural and extractive industries, it is in a measure bound up with them, and thus by reaction is subjected to the law of their limitation; and further, it is evidently once more limited by the amount of labor and of capital that it has at its disposal.

IV. How Limitation of Production affects Prices.

If the working of these laws of decreasing returns be accurate, they should have a double practical consequence, which would easily verify them. They ought to involve, on the one hand, a constant rise in the price of natural, and particularly of agricultural, products; on the other hand and inversely, a constant fall in the price of manufactured goods and in the cost of transport.

Now this double phenomenon is manifested in all European societies, and in a striking enough way to excite the attention of all but the least experienced of observers. There is no housewife in France who has not made moan over the constant increase in price of all market produce, — meat, poultry, fish, game,

butter, eggs, vegetables, fruit, etc., — that is to say, of agricultural produce.

The rise would be even greater than it is, were it not for the increasing improvement in means of transport. Just as the law of decreasing returns tends to raise the price of agricultural produce, so are prices lightened by the fall in the cost of transport. Here, then, is the explanation of the fact that corn, the most important of all agricultural products, does not appear to have sensibly increased in price during the last twenty years; for, as we know, the law of decreasing returns is, so to speak, suspended every time that a country can obtain from abroad the additional food supplies that it may need. The only proviso is, that the conveyance of these articles of food is not too difficult. Corn meets our point; for, though cumbrous enough, it is easy to convey. If the transport of meat, whether as livestock, or in a preserved state, were to become equally easy, the law of non-proportionate returns would be likewise suspended as far as regards this product, and the price of meat would become stationary.

The fall in price of manufactured goods is no less evident, and it would be a waste of time to adduce unnecessary figures. Think only of made-up dresses, linen, paper, glass, books, and in a word, of all modern goods. There are only two exceptions, and these are not difficult to explain.

Firstly. Certain articles of luxury (lace, art-furniture, etc.) do not share in this fall of prices, for they are usually more or less works of art, and thus do not benefit by the economic advantages of wholesale production and of machinery.

Secondly. Some others, too, fail to reap any benefit because raw material represents the greatest part of their value. Now as this raw material can be none other than a product of agriculture or of some extractive industry, it falls under the working of the law of non-proportionate returns, and necessarily reacts upon the industry which uses it. It is clear that the price of table-plate depends on the price of silver, the price of flour on that of corn. Similarly, although in slighter measure, the rise in price of an

agricultural product, such as wool or leather, may stop or slacken the fall in price of manufactured goods, such as cloth or shoes.

An important correction must be made in these statistical observations on the variations in prices. We must allow for the depreciation of money. It is clear that, as this is shown by a general rise of prices, it must exaggerate the rise in value of agricultural produce, and inversely must conceal a portion of the real fall in value of manufactured goods. It may be paralleled by what occurs when we travel by train. The speed of our own train diminishes in our eyes the speed of the trains that pass in the direction in which we are going, and inversely increases the speed of those that are going in the opposite direction.

If we calculate that the price of any agricultural product, which sold for 1 shilling in 1848, is now 2 shillings, we must beware of saying that its value has doubled; but knowing that 2 shillings to-day are not worth more than 1 shilling and 6 pence thirty years ago, we should say that the value of the article has really increased only 50 per cent. Inversely, if a manufactured commodity, which was sold for 4 shillings in 1848, is now sold for 2 shillings, we must not only say that its value is less by a half, but knowing that 1 shilling now would be worth only 9 pence in the money of those days, we must add that the value of this article is really lowered by 63 per cent.

The experimental verification given above is especially striking when we compare a new country, whose production is in its infancy, as regards both agriculture and manufactures, with an old country, whose dense population has forced production to develop on a large scale. In the Western States of America, or in Australia, there is a complete contrast between the extreme cheapness of agricultural produce and the dearness of manufactured goods. Food costs very little, but clothes and housing cost a great deal. Thus the table of the humblest workman is abundantly supplied, whilst the wardrobe and the furniture of even the wealthy is exceedingly simple. In old countries matters are the other way about: with us expenditure on clothes and furniture makes up

only 10 or 15 per cent of the workman's budget, whereas food stands for 60 per cent.

The result is that the law under discussion has most serious effects on the condition of the poorer classes of society. It enhances the dearness of the articles that are the most useful to them, those they cannot dispense with, and that hold the chief place in their consumption. On the other hand, it cheapens only those things that are of the least importance, and that absorb only a small portion of their budget. Modern industry, therefore, should direct all its efforts of discovery and invention to the case of the production of articles of subsistence. Unfortunately in that quarter it has hitherto made the least advances. Agriculture lags far behind manufacture, and we know the reason why.

CHAPTER II.

EXCESS IN PRODUCTION.

I. How to maintain the Equilibrium between Production and Consumption.

Not to produce enough is an evil. To produce too much is also an evil, and, though less serious than the former, it is still a grave ill. For all excess in production necessarily involves not only a waste of wealth, but also a useless throwing away of forces and of pain, and may even bring along with it those disorders which are called crises. The state of health for the social body, just as for all living bodies, consists in an exact equilibrium between the forces of production and the forces of consumption.

In every prosperous society this equilibrium exists, and is preserved in a more or less stable manner, but, we must ask, in virtue of what law?

If, like Robinson Crusoe on his island, each man produced for himself all that he needed to consume, there would be nothing surprising about this phenomenon, for each one of us is in a certain measure able to forecast his wants; and, though his predictions may sometimes be erroneous, he is able to regulate his production thereby.

Nor would the circumstance be surprising if, even under the working of division of labor, each consumer were to inform the producer in advance of what he required, and if each producer worked, as the saying is, *to order*.

But it must be observed that in our actual societies nine-tenths of consumers come to the market without having troubled to make their wants known in advance, and that similarly nine-tenths of producers bring their goods to the market without having waited

for any demand. Yet in spite of this absence of any prior concert, the equilibrium between production and consumption is usually preserved in a satisfactory enough fashion. No doubt it is often disturbed. As we shall soon see, instances of deficiency or of excess are frequent; but in the end, after a series of more or less sharp oscillations, the beam of the balance always tends to return to a normal position.

This, indeed, is the favorite example cited by all economists, who, like Bastiat, endeavor to prove the existence of a spontaneous order, of a pre-established harmony in all economic relations. Perhaps they show their pleasure in rather too exuberant a manner; nevertheless it is true that in great cities, such as London and Paris, every day millions of inhabitants are sure of finding all they want (that is to say, those who can pay for it); and if we consider that this equilibrium is spontaneously maintained through the length and breadth of a vast country, without any prior arrangement, without the intervention of any directing authority, if we observe further that probably the best organized government would be unable thus to supply a great nation with means of subsistence from day to day, if we can judge of it by the difficulty experienced in provisioning a few army corps, we cannot neglect the fact that here there is a phenomenon which is well worthy of our attention.

Yet its explanation is simple enough. The law, which constantly re-establishes the momentarily disturbed equilibrium between production and consumption, is that which we have already observed regulating the distribution of workers among the various branches of production; it is the law of supply and demand; it is the law of values, which we expressed in the following formula: "Things have more or less of value, according as their quantity is more or less insufficient for our wants."

Whenever, then, any commodity is seen to have been produced in greater quantity than is required, its value will fall. The result of the fall in value will be to reduce the income of producers, and in particular the profits of the employer, who is the principal

agent in production, and who consequently is directly affected by all reactions. Naturally he will step back from a path on which he experiences miscalculations and losses, and the production of the commodity will be slackened, until the quantity produced has fallen back to the level of the quantity consumed.

On the other hand, whenever any commodity has been produced in less quantity than is required, its value will rise. Similar consequences will be produced to those just explained, but in an inverse direction; that is to say, producers, and the employer in particular, will realize larger profits. Attracted by the bait of these profits, which are above the normal rate, other producers, whether capitalists or workers, will enter on the same path. The production of the commodity will then increase till the quantity produced has risen to the level of the quantity demanded.

II. Crises.

This equilibrium between production and consumption is subject to derangement, and that not unfrequently; whenever a rupture of equilibrium is thus produced, we say that there is a *crisis*. These crises are literally the maladies of the economic organism; their features are as varied as those of the innumerable illnesses that afflict mankind. Some have a periodic character; others are totally irregular. Some are short and violent, like attacks of fever; others are slow "like anæmia," to use M. de Laveleye's phrase. Some are localized in one specific country; others are epidemic, and rage through the world.

Some economists have attempted to construct a general theory of crises by describing the laws which regulate them. This attempt has been made in a very ingenious manner by Stanley Jevons, who minutely described the characteristics of crises, and concluded that they were reproduced periodically every ten years. In fact, from the beginning of the present century, he reckons nine crises: those of 1815, 1827, 1836, 1839, 1847, 1857, 1866, 1873, 1878. Yet, as crises are great or small, general or local, it

is easy to count few or many, and to choose dates to suit your theory. Of those confined to England, there have been at least fifteen; and of those which have spread over the whole world, there are really scarcely more than three: those of 1825, 1847, 1857, and the latest, which started in 1878 and lasted ten years. According to Jevons, this ten-yearly periodicity would seem to correspond to a similar periodicity of bad harvests; and the cause of this appears to be a decennial periodicity in the spots on the sun. In this manner the question of crises, their causes and their development, would be reduced to an astronomical problem. The picture is brilliant, if not convincing. Other writers on this are de Laveleye, *The Money Market and its Crises*, and Juglard, *Commercial Crises and their Periodic Recurrence*.[1]

In spite of the premature nature of these attempts, it is possible to discover in crises certain common characteristics, and to refer them in particular to one and the same cause; namely, as said above, a rupture of equilibrium which happens to be too sharply effected either in the production of a large number of commodities, or in the production of some wealth which is particularly important from an economic point of view; such as corn, capital, metallic money, or credit papers. In each of these cases, which we now propose to pass under review, the loss of equilibrium may be shown in the shape either of a glut or a deficiency. The second would seem to be far the more formidable of the two; yet it is the former that is the most dreaded (except when money is the article), and the only one which is usually termed a crisis.

Firstly, glut or scarcity of commodities. A general glut of commodities is one of the most usual forms of economic crises, and may be regarded as a kind of chronic malady or constitutional infirmity attaching to modern industry. The development of wholesale production, mechanical inventions, and improved means of communication have enabled industry to throw upon the market such enormous masses of products that the consump-

[1] Also Max Wirth, *Geschichte der Handelskrisen* (4th ed., 1890).—J. B.

tion is not large enough to absorb them as they come into the market. This is not because men's wants are not large or indefinitely extending, but because to find a sale for an article requires not only people who would like it, but also people who are able to acquire it. Now, the increase in income of the bulk of the population has not usually been as rapid as the increase in manufacture.

It is on this point that the collectivist school rely entirely for their explanation of these crises, which, according to them, are destined to multiply until they bring about the complete ruin of modern industrial organization. The working-classes, say they, are robbed by the capitalists of about half the produce of their labor, and therefore, with the wages they receive, are unable to *buy back the produce of their labor;* hence the glut. Were they given what is due to them, and their powers of consumption thus made equal to their powers of production, there would be no more crises.

This explanation seems inadequate; for, even granting the fact of spoliation, nevertheless it would only mean a transferrence of the power of consumption from one class to another, and it is not clear why the robbers should not consume as much as the robbed.

To proceed: most countries nowadays seek to close their markets to foreign products, at the same time trying to introduce their own products into other lands; and such goods, driven back here and kept out there, tend to accumulate, as if in tapless reservoirs. In order to succeed in finding an opening for their products, and to have them gradually absorbed by consumption, producers are therefore obliged to lower their prices; this general depreciation of prices has, as inevitable consequences, lowering of profits, and failures, on the one hand; lowering of wages, and the throwing out of work, on the other hand.

In the inverse shape of a scarcity, the crisis may sometimes be very formidable; for instance, we can recollect the disasters caused by the cotton famine, which resulted from the Secession War in the United States. A bad harvest of cereals may bring about

public disasters in poor countries such as India and Algeria; and even in rich countries, like the countries of Europe, however slight the deficiency, it always provokes some sort of crisis.

It often happens that this crisis from an insufficiency of production may indirectly produce the same effects as a crisis from excess of production; namely, a general glut on the market and a depreciation in the value of commodities. However paradoxical it may seem, this assertion is easily explained. For a deficiency in the corn crop causes a rise in the price of corn; hence all consumers of corn whose means are limited, *i.e.* by far the greater part of mankind, are obliged to restrict their expenses on all the other articles of their domestic budgets. Hence a mass of goods, being no longer in demand, cannot find a sale, or at best are only sold at a loss. In this manner famines in India almost inevitably produce a crisis for English manufacturers.

Secondly, glut or dearth of capital. Capital, too, is an article which may cause certain dangers, if it is produced in excess. No doubt we could not have too much capital, just as we could not have too much of commodities in general; but, as at any given moment there may be too large an amount of goods to be consumed, so, too, there may be too much capital to be profitably used. In an old country, where saving is active and rolls up in snowball fashion, and which has been thoroughly worked for long centuries past, and therefore cannot offer an unbounded field for new savings, capital tends to accumulate in huge quantities. Naturally, in consequence of this abundance of capital, interest falls, and men busy themselves to find more productive investments; new enterprises are floated either abroad or at home, some of them of a singular nature, some altogether foolish, and finally there comes what in stock exchange language is called a "crash." Some of these have acquired a momentary renown in our financial history, such as the Overend Gurney crash in 1866, the Vienna crash in 1873, and the Paris one of 1882.

However, we must draw this distinction between commodities and capital: a glut of commodities depreciates the value of goods

and ruins producers, whereas a glut of capital raises the value of capital and enriches capitalists. This result, though singular at the first sight, is not hard to account for. The fall in the rate of interest changes the rate of capitalization for the future, and *already invested* capital necessarily profits thereby. Let the rate of interest be supposed to be 5 per cent; a security, then, which yields £50 is worth £1000; but suppose that to-morrow, in consequence of a glut of capital, the rate of interest on new undertakings falls to 3 per cent. Then the security which gave and still gives £50 will be worth more than £1000, as a simple rule-of-three sum would easily show. There is still this curious contrast, that, whilst traders lament at the glut of goods, capitalists rejoice at the glut of capital, though indeed a crash is not slow in causing quite other feelings.

Capital may also fall short of requirements in consequence of such crashes as those we have just spoken of, or after a war which has swallowed up large quantities of it. In this case there will be a crisis, but one marked by opposite symptoms to those set forth above; viz. by a rise in the rate of interest and of discount, and by difficulty in obtaining money.

Once more, there may be a disturbance of the normal proportion which ought to exist between fixed and circulating capital, the circulating capital being of insufficient amount relatively to the fixed. This has happened in some countries which have been so imprudent as to devote all their savings to the construction of railways, and have thus not had a farthing to spend on the development of their industries and of these very railway lines.

Thirdly, excess or dearth of coin. Must we here, too, speak of a crisis caused by excess? The general public will not allow that the fact of having too much money can constitute a crisis, and even some economists do not readily admit that we can talk of superabundance when speaking of money.

However, it is undeniable that there is a certain proportion between the amount of money which ought to be in circulation in a country and the needs of that country, and that if this quantity

is suddenly increased a crisis will result, which will take the form of a general rise of prices, and will have very serious consequences for all consumers, and particularly for creditors and persons living on a fixed income.

All that we can say is, that it is the easiest thing in the world for a country to get rid of its excess of money, if it ever reaches such a position, and that the very force of circumstances aids in that task.

Every one will agree in recognizing that an excess of money may cause a crisis of a most dangerous kind, if this money is in the form of paper money, or even of bank notes. But we need not return to this, for we have already shown the causes of such a crisis and the means of preventing it.

On the other hand, a diminution in the quantity of money always occasions the greatest alarm. This dread, no doubt, is partly occasioned by certain preconceived opinions as to the part played by money; yet we have several times shown that such fears are not without foundation, and M. de Laveleye (*vide op. cit.*, pages 105, 117, 118) regards this circumstance as the only essential cause of all crises. When the balance of trade has long been unfavorable to a country, and its reserve of coin is not large, a time comes when it has no longer enough money. Then the bank reserve diminishes, the exchange becomes unfavorable, the rate of discount has to be raised, and many merchants, being unable to meet their engagements, become bankrupt. These are called *monetary crises*. They are the most dangerous of all, for they seem in the highest degree to possess an epidemical character, but they are also those that have been the most thoroughly studied: their approach can be the most easily foreseen, and therefore can be the most successfully forestalled.

III. Is there Reason to Fear too much Production?

The question asked in the title appears a strange one after what we have stated in the previous chapter; namely, the frightful in-

crease in consumption, and the difficulty production has in coping with it.

Yet the possibility of an excess of production, of a *general glut*, is a nightmare that haunts the minds of all business men. The feeling is not hard to understand. Since every producer immediately sees that his goods sell the better the scarcer they are in the market, he naturally concludes that scarcity is a good and abundance an evil.

Economists have long tried to prove to them that the multiplication of products is a good, not only for consumers, but also for the producers themselves. Of course they do not profess to show that there may not be an excess in production relatively to the requirements in any given industry, or that such excess should not be regarded as an evil. That would be to act in flagrant contradiction of the facts studied in the last chapter. But given a glut in one branch of production, economists consider that the best remedy for the ill is to bring about a proportionate increase in the other branches of production. The crisis arising from abundance should naturally be cured by abundance itself; *similia similibus*, as the homœopaths say. Thus all producers are interested in making production as abundant and as varied as possible. This theory is known as the law of markets (*la théorie des débouchés*). It was first promulgated by J. B. Say, who was extremely proud of it, asserting that "it would change the face of the world." It may be expressed as follows: "The more abundant and varied products are, the more markets do they find."

Although this assertion seems to savor strongly of a paradox, it is nevertheless well founded. In order to understand it we must eliminate money, and suppose that products are exchanged first-hand for products, as is done under the system of barter. Besides, this abstraction is a perfectly legitimate one to make, for, as we have seen, no one exchanges products for money except to exchange, sooner or later, this same money for other products, and thus the instrument of exchange can be justly eliminated from the operation in the mind's eye.

Let us take a trader who arrives at one of the great markets of Central Africa, say at Rhadames or at Timbuctoo. Is it not to his advantage to find the market as well stocked as possible with products in large numbers and of great variety? No doubt he has no desire to find large quantities of the *very commodity* that he has to offer, — say muskets, — but it is to his interest to find as much as possible of all the rest — ivory, gum, gold dust, arachides, etc. Each new commodity which appears in the market represents an investment, or, as this theory says, an outlet for his own article; the more there are of them, the greater the value of his. And, even if he has the ill luck of having brought too many guns, what he should wish for is that others should also have brought too much of their goods to this market. In that case the markets will no longer be in excess relatively to the other goods, for as J. B. Say admirably says, "What can best favor the sale of one article is the production of another."

The same takes place under the system of sale and purchase. Each of us has the more chance of disposing of our goods or of our services, the greater the resources of all the rest; and the more they have produced, the greater their resources will be. The heart's desire of a producer who has produced a commodity in excess is that all other producers should have respectively done the same. The excess of some will correct the excess of others. Has England produced too much cotton stuffs? If by good luck India has grown too much corn, in that country England will more easily be able to dispose of her cotton.

Thus, thanks to the prodigious increase of its mechanical resources, industry throws upon the market a huge mass of goods. The result is a *general glut*. But why? Because agricultural production has not marched *pari passu*. Its produce has only increased in a slight degree; its value has risen, compared with the value of manufactured goods. Hence consumers, who are obliged to spend far more on the means of subsistence, have no longer enough wealth to buy much of manufactured articles; but, were agricultural production ever to progress equally with

manufacturing production by machinery, equilibrium would be speedily re-established. For, as the consumer would spend less on food, he would easily absorb the excess of manufactured articles.

Lastly, let us suppose that all products, without exception, increase in quantity; it may still happen that prices may fall and that there may be a general glut. What is the explanation? that on our hypothesis one product alone, money, has not increased in quantity. There is therefore a change in the respective values of money and of commodities in general, for coin being relatively scarce, prices fall. *But if we could multiply money to the same extent as other commodities, the evil would be cured,* for then the relation of values, which we call price, would not be changed and the crisis would not be produced.

In fine, the theory of markets merely tends to show that there is nothing to fear from excess in production *whenever the increase in production operates simultaneously and proportionately in all branches of production.* In these terms is expressed an incontestable truth; the human race runs no risks, at any rate for a long time to come, of growing too rich. Unfortunately, increase in production is not usually exhibited under the conditions desired by the theory of markets. It is an extremely rare coincidence to see a simultaneous and equal increase in all branches of production; the previous chapter has shown us that in this respect agriculture and the manufacturing industry are strikingly at variance. Increase in production usually takes the form of sudden strokes, of intermittent and local movements; hence it causes those ruptures of equilibrium, the crises already analyzed, and therefore men of business have always something to fear in this regard.

Summary 337-344.
(a) % + amt \ money remains + same
1. Over prod \ commodities means lower prices,
2. Scarcity \ " " " except wheat.
(a) % + vol \ " remains + same
3. Over prod \ exp means lower price
4. Scarcity \ exp " "
5. Over prod \ coin " higher "
6. Scarcity \ " " lower "

7. Overprod in all commodities means + same price
8. " " " manfrs " higher prices in w
be able to give a special instance of each of
these from Gide.

CHAPTER III.

omit to 367

PROGRESS IN PRODUCTION.

I. Current Illusions as to Economic Progress.

Progress is a theme upon which men of our day execute the most brilliant variations; its marvels in economics are ceaselessly extolled, and everything seems to be expected from it. The socialists, who are so terribly pessimistic with regard to the actual state of social development, cherish most chimerical hopes as to economic progress. Thus they picture to themselves an almost unlimited increase of wealth by means of machinery, whilst a day's labor would be reduced to four hours. But what do we see on a closer examination? Truly wonderful improvement in the means of transport and of inter-communication, the possibility of easily obtaining the products of the Old World and of the New either for our necessities or for our luxuries, the lowering of the price of some articles of manufacture, a great development in what we may call "creature comforts." These are the sum total of the results of progress in matters economic. They certainly amount to something, but to nothing of the nature of an essential change in man's condition, nor even a glimpse of such. There does not appear, then, to be much reason for great pride in progress accomplished, but rather for some surprise that such comparatively trifling results are all that we have gained from the scientific, mechanical, and industrial development achieved in the present century.

But this apparent contradiction is not hard to explain, for progress hitherto has worked only in the least important branches of production, and those that are least essential to man's existence and his real welfare.

Let us now study the case of machinery, for in that form progress in production is the most strongly marked.

According to the statistics issued by the Office of Public Works, there are now in France about 5,000,000 horse-power, the force developed by which may be calculated to be that exerted by 100,000,000 men. For one horse-power is regarded as doing the work of three average horses, and the strength of one horse is estimated to be seven times greater than that of a man.

Now as there are not in France as many as 10,000,000 adults, we may say that the productive power of the country has been multiplied by machinery in the proportion of 1 to 10; or if the more picturesque metaphor be preferred, that every French workman has henceforward ten slaves in his employ, which ought to give him a position equivalent to that of the Roman patricians; that is to say, allow him to amass the pleasures afforded by wealth and those enjoyed during leisure.

Unfortunately there is much of the imaginary in this picture, as is easily shown by an analysis of the above statistics. Almost the whole of this enormous force is applied solely to transport by land or sea, to the amount of nearly 4,000,000 horse-power, seven-eighths of which are absorbed by locomotives. The 4,000,000 horse-power employed in transport have produced an important revolution in some respects. They have greatly increased the solidarity of the human race by doing away with the difficulties that distance presented to the free communication of individuals, to the exchange of products, and to spreading abroad of new ideas. From this point of view, the use of machinery has rendered a moral service of enormous importance, but it can hardly be said to multiply production.

Moreover, we must concur with M. Leroy-Beaulieu's remark, that there are many instances of *double* uses. Much machinery is entirely devoted to the production of *other machines* or to the extraction of coal wherewith to feed them (see his *Sisyphisme et Paupérisme*).

The only products, the increase in which can powerfully improve

the condition of the working classes, are agricultural produce, for the primary condition of material welfare is food, and if possible good food and plenty of it. Now what results have the use of machinery produced in agriculture? Great ones, no doubt, in new countries such as the United States, where the wide stretches of land do not always find enough arms to till them. But of little importance in countries which are already cultivated and peopled. In France there are not 100,000 horse-power employed in agriculture, and scarcely any of them have tended to increase production. Mowing-machines, threshing-machines, reaping-machines, do not increase the crop of corn by one grain; they only economize manual labor. No mechanical or chemical methods have yet been found for the manufacture of food, in spite of the high pitch of the art of adulteration.

Still the following question is always worthy of our consideration. Since the limitation encountered by agricultural industry arises from the fact that its materials are living things, why should it not attempt to overcome this obstacle by boldly dispensing with the assistance it receives from the mysterious forces of life, and endeavor to manufacture *de novo* the food-supplying substances, just as a manufacturer fabricates chemical products?

We know that all the tissues of living beings, whether animal or vegetable, are almost exclusively composed of oxygen, hydrogen, nitrogen, carbon, and, in a very small proportion, of a few mineral salts, all of which are elements which may be regarded as existing in excessive quantities in the earth's crust and in the atmosphere. Theoretically, then, our problem does not appear to be insoluble. If, indeed, any chemist were ever to solve it, he would have achieved a far greater thing than the *magnum opus* of the alchemists; he would have found at the bottom of his crucible far more than the solution of a chemical problem or even of the problem of life; he would have solved the social problem, or, at any rate, would have changed from base to apex all the laws of political economy. If men are ever destined to produce their means of subsistence by purely industrial methods, agriculture would be-

come a thing of nought; and as man would only claim from the earth space for his foot to tread and for his dwelling to occupy, each acre of land would be able to support as dense a population as is now heaped together in the most crowded quarters of our great cities. But will that day ever come? It is gravely to be doubted; and up to the present, in spite of some brilliant attempts, chemistry has not been able to turn the flank of the law represented by the old adage, *Omne vivum ex vivo*.

The same may be said of an industry which is likewise of capital importance — house-building. Machinery is scarcely applied to this class of production, save for exceptional buildings. We put up our houses as was done in the days of Noah, by piling up on one another stones or bricks, and joining them with cement. The result is that an increase, proportionate to requirement, is not effected in the number of comfortable houses, which is one of the essential conditions for happiness, health, family life, and morality. House rent is still a heavy burden to the rich and ruin to the poor, and the rent of houses grows even dearer than the price of food. Nor are *houses* constructed according to mechanical principles. Perhaps that result might follow if a general use were to be made of houses composed of iron or sheet-iron, which could be taken to pieces, and moved from place to place according to requirements. These attracted attention at the last Paris Exhibition. Their adoption would revolutionize matters.

II. The Disadvantages necessarily involved in All Progress in Production.

Besides confessing that the results of progress are far smaller than is generally believed, we must further admit that its results are always disastrous to certain classes of people. For the better understanding of this, we must explain and define what is meant by progress in production. It consists simply in *diminishing the amount of labor necessary to produce a given result.*

The most striking example that can be cited is the invention of

machines which multiply man's strength tenfold and a hundredfold.

For instance, certain armored ships have machinery of 10,000 horse-power. Each horse-power is equal to the strength of about ten men, and as it is able to work ceaselessly night and day, the figure must be doubled, making it equal to twenty men. Such vessels, then, are moved by a force equal to that of at least 200,000 rowers. If we suppose that there are 100 engineers or stokers, the strength of each of them may be regarded as being multiplied by 2000.

One number of the Paris *Figaro*, together with the supplement, makes 240 pages of print of octavo size. If we grant that 100,000 copies are struck off, that means that in one night 26,000,000 pages are printed, or the equivalent of 40 or 50 volumes. To copy them in the same space of time, *i.e.* in six hours, we should have to use an army of 500,000 copyists. If, then, we suppose that there are 100 men employed at the printing office, each printer develops a power of labor equal to that of 5000 copyists.

Still, all improvements in the organization of labor, — *e.g.* division of labor, which facilitates a better use of each man's time and tastes; wholesale production, which economizes sites and capital; exchange, and particularly international exchange, which puts to a profitable use the natural resources of respective countries; the substitution of paper money or of credit for metallic money; mechanisms such as co-operative societies, which, by doing away with middlemen, tend to put consumers and producers into direct relations; railways, telegraphs, telephones, — all these things (in fine) have no other object than to save a certain amount of time, trouble, or expense, in other words, of labor; just as we have shown to be the case for each one of these modes of production.

Now it is certainly a great gain to be able to reduce the amount of labor necessary for a given result, to procure the same satisfaction with less effort; for it is a diminution of pain; it is the setting free of a new force, which can be utilized, if need be, for new production. It is certainly all this; but, given our present

economic organization, which is based on division of labor and on individual property, it is found that this general good takes the shape of evil for many individuals. For by rendering useless a certain amount of labor, it *at one and the same time renders useless a certain number of laborers*, and obliges them to seek painfully for some other way of gaining a livelihood.

The reason of this is simple enough. Each of us lives from the income obtained by his respective work in some particular occupation. Here is a workwoman of Auvergne who makes lace; there is a peasant of Vaucluse who cultivates madder. Now, in consequence of an improvement in production, such as the invention of a lace-making machine or the discovery in coal-refuse of aniline red, this particular work is made useless for our specified workman to do. At the same moment the source of his income is dried up. No doubt he will always be able to try and employ his labor elsewhere by seeking for some other occupation; but such changes are never easy; and for those who have nothing laid by, *i.e.* for workingmen, this want of work will necessarily cause suffering and misery. Similarly, the facility of transport that now enables us to obtain at a low rate Californian corn and Chinese silk ruins the French landowner who used to grow corn or rear silk-worms. Once again, in the same way, the development of co-operative societies ruins a large number of small shopkeepers.

These are by no means *contingent* results which might or might not come to pass; they are the necessary consequences of the double principle on which modern society is based, — private property and division of labor.

If there was no division of labor, if each man produced only for his own consumption, there would be no such results as the above. For Robinson Crusoe on his island there was unmixed benefit in every machine, in every sort of invention, that enabled him to produce more with less labor. He had everything to gain and nothing to lose.

Were there no private property, *i.e.* if men lived under communism once more, these results would never come to pass. For

the Icarian or the dweller in the Phalanstery, who knows that his cover is always laid at the common table, it matters nothing that any invention should arise and render his labor useless. If the joint society wishes him to labor, it will find him some other work; if it is unable to find any, so much the better for him; he can then fold his arms in peace.

Still we must not be led to conclude, as communists are too eager in doing, that since private property is the real culprit, it must be done away with. Why not say the same of division of labor and propose to stop it likewise, since it is in equal measure responsible for this state of things? All that we can say is that progress in our world is always accompanied by evils, and that it makes the human race pay dearly for the benefits it gives. That is a most patent commonplace, but some commonplaces are also truths, and this is of the number.

Further, progress is not only paid for by privations and by want of work; it is often bought by the price of blood. To take only machinery: there is scarcely a day when several workmen have not their ribs broken by the blows of the engine-buffer, or are not killed by an explosion of fire-damp, or blown to pieces by the bursting of a boiler, or made mince-meat of by a toothed wheel. The construction of every mile of railroad costs on the average the life of one man, and the opening up of every 100 miles five or six accidents yearly. As there are now 500,000 miles of rail in the world, 500,000 men must have been sacrificed in their making, and 30 out of a 1000 every year for working them. The most sanguinary of wars must yield the palm to this.

III. The Question of Machinery.

The opposition just pointed out between the interests of society and the interests of individuals is highly displeasing to economists, especially to those of the optimistic school, who regard harmony in things economic as an article of faith. It has therefore been their endeavor to show that economic progress and particularly

machinery (for there the shoe is said to pinch, though all improvements in production fall under the same censure) do no harm at all to the working classes.[1]

The following are the three arguments they adduce: —

Firstly, lowering of prices. Every mechanical invention, say they, has as its result a lowering of the cost of production of the article, and consequently of its value. The workman then profits *qua* consumer from the fall in prices just as much as he loses *qua* producer.

It is indisputable that every improvement in production, especially in the sphere of mechanical invention, brings about a fall in prices; but does this really give any compensation to the workman, the value of whose work is thereby depreciated?

There will certainly be no compensation if, as is highly probable, the product in question is not one that he is in the habit of consuming. Lace-making by machinery has certainly lowered the price of lace; but as the poor woman who used to make them is not in the habit of decking herself with lace, she assuredly gains nothing by the invention.

Even admitting that the product is consumed by the laborer, it may be only occasionally or slightly used by him, and then the compensation is purely derisory. The stocking-knitter, who loses her wages after the invention of a knitting-machine, will not readily find much consolation in the prospect of being able hereafter to buy her stockings cheap at the hosier's.

For the compensation to be a real one, it would be necessary for mechanical progress to be shown at one and the same time in all branches of production, so that the resulting fall in prices might be both general and simultaneous. Then, indeed, it might be said that the workman would not suffer from receiving only half his former wages, if concurrently all his expenses were reduced by half. The nominal wages would have altered, the actual wages would have remained the same.

[1] With some reservations Mr. Edward Atkinson may be taken as representing the optimists in America, and Mr. Giffen in England. — J. B.

But the very enunciation of this hypothesis is enough to show its chimerical nature. We have already seen that mechanical discoveries are not made in all branches of production, but arise only in a few of them, and that virtually they do not affect in the least the expenses which occupy the foremost place in the workman's life and weekly budget; viz. food and housing. We have previously said that, according to his position, these expenses absorb from 60 to 75 per cent of the workman's income. Thus, as regards four-fifths of his consumption he receives no compensation at all.

Secondly, increase of production. The optimists further say that every mechanical invention, by virtue of its causing a fall in price, must involve a corresponding increase in sales, and that therefore, in the long run, it brings back the laborers it had momentarily deprived of their occupation. Instead of taking work from them, it makes work for them. There are hosts of examples of this — the multiplication of books since the invention of printing, of cotton-stuffs since the introduction of weaving-machines, etc.

This, indeed, is a new sort of compensation, but it is no more satisfactory than the above, and there are many reasons for this.

First of all, though increase in sales is the usual consequence of lowering of price, this is not invariably the case.

Whenever a product answers only to a limited want, its multiplication is therefore equally limited. The instance of coffins has become classical; but the same holds good of many other articles — corn, salt, some chemical products, etc. A fall in the price of these would only slightly increase their consumption.

Whenever one industry is bound up with other industries it can only increase its production accordingly as they increase theirs. This is of very frequent occurrence. The production of bottles and wine-casks is limited by that of wine, and, however much the price of these bottles and casks may fall, not an inch more of them will be sold if there is no more wine to put in them. Similarly, the production of watch-springs is limited by that of watches; the production of bolts by that of rails and of boilers; and again,

the production of the last named is in its turn restricted by other causes independent of their prices, *e.g.* the improvement of transport, the number of mines, etc.

Further, sometimes mechanical invention has not caused an increase in production, but has merely led to a diminution of manual labor. Most agricultural machines — mowing, threshing, and reaping-machines — do not add one grain to the crop. Steam-cranes on quays, used for the unloading of goods, evidently do not increase the quantity of such goods.

Even admitting an increase in consumption, proportionate or more than proportionate to the fall in prices, it will require a long time, perhaps some generations, before the completion of this evolution. Time is needed for the former prices to fall, more time, indeed, seeing that the biassed opposition of manufacturers and the existence of acquired habits will tend to retard the fall. Competition will finally get the upper hand, but rival industries are not built up in a day. Further time will be needed for the fall of prices to enable the products to penetrate those new strata of society which do not change in a brief day their tastes or their wants. Now during all this time what will be done by the workman who lives from hand to mouth? There will perhaps be some compensation for his grandchildren, but there will be none for him.

Thirdly, increase in the wages-fund. Every employment of machinery that economizes manual labor necessarily involves, so the optimists think, a gain for some one, which is realized either by the producer, in the shape of extraordinary profits, if he continues to sell his goods at the old price, or by the consumer, in the form of smaller expenses, if, as is most probable, the price of the article falls to the level of the new cost of production.

The money which is so much the less in the pockets of the men who are turned away is not lost, then; it reappears in the manufacturer's bank book as an increase in income, or in the consumers' purses as a saving that has been effected. But what will the manufacturer do with his increased income, or the consumer with his savings? They will either invest them or spend them;

there is no other alternative. Now in either case this money must go to encourage some industry and develop production, either by buying new products or by contributing to the production of new capital. (See below, "What is Investment?" page 390.) Labor, therefore, will recoup itself by this increase in production for its former losses.

The argument goes on to say that, when once this evolution has been perfected, the sum which was taken from the wages-fund by the mechanical inventions will end by returning to labor. The result of every mechanical invention is to render available, to set free, as a chemist would say, not only a certain quantity of labor, but also a certain amount of capital; and, as these two elements have a great affinity for one another, and even cannot subsist apart, they always end by meeting again, and once more combining together.

The above reasoning is perfect from a theoretical point of view, but we must ask, "How and when will this combination be effected?" Perhaps in ten years and at the other end of the world. Possibly the consumers' savings will be employed in the cutting of a canal at Panama or in the making of a railway in China. Capital, when once set free, can easily find investment; it has wings, can take flight, and settle where it wills. Unfortunately the workman is not equally mobile or movable. He is not fit for every kind of work, and cannot so easily go to the ends of the earth to seek it. In the long run that will be done, if not by him, at least by his successors, for it must be so. Yet the evolution will be a long and painful one. That is all that we assert.

The following can be our only answer to this sombre question of machinery: probably the great mechanical and economic transformation which has been witnessed by our century is now approaching its termination.

History shows us that in the economic evolution of our race periods of rapid change have been followed by long periods of a stationary nature. It is therefore probable that the huge economic revolution of our days will be followed by a long period of rest, or at any rate of very leisurely progress, resembling the thousand

years and more that preceded it. The invention of the steam-engine has already, or at least will soon have, produced most of the consequences that can be expected from it. Is it replied, "Another will be invented"? What do we know as to that? And, even were such a prediction to be realized, it is certain that the substitution of this unnamed machine for the steam-engine would not produce a revolution comparable to that effected by the substitution of steam for manual labor. Within the next half-century the whole world will have been girded and interlaced by the network of electric telegraphs and of railways. Here there is a definitive transformation, which will not need to be done over again. Let us grant that balloons will prove capable of guidance. Can we imagine that conveyance of travellers and of merchandise by balloon will have the same economic consequences as the replacing of the high-road by the railroad? Finally, in a few generations hence, the human species will be settled on all the available space that still remains upon the surface of our planet. There will be no more vacant land, and there will be an end to the competition of new countries on our old markets. Everything, then, leads us to believe that our grandchildren will not be hurried along by the same whirlwind as we have been, and that they, like our fathers, will be able to live a calmer life.

IV. The Future of Production.

If we endeavor to forecast what kind of future is in store for modern society from an industrial point of view, we are confronted by two antagonistic opinions.

The public as a whole (and most of the socialists share the same views) is full of a boundless confidence in the progress of the mechanical sciences and arts and in the omnipotence of the human genius. Hence arises the pleasant belief that the multiplication of wealth will become so easy that the human race will be enabled to live in plenty, if only each man has to work merely three or four hours a day with an absence of actual fatigue.

Others think that the present production of wealth would even now be enough to satisfy the legitimate wants of all men, if it were better distributed, and that our aim should be to moderate wants rather than to multiply wealth. John Stuart Mill, the eloquent apostle of this doctrine, believed that we are approaching a stationary period in which the stream of human industry will finally spread out into a stagnant sea, and when we shall cease to see one sex occupied in money-hunting, and the other sex occupied in rearing money-hunters. He held "that it is only in backward countries of the world that increased production is still an important object; in those that are advanced, what is economically needed is a better distribution of wealth." (*Political Economy*, IV, vi, sect. 2.) That, in our opinion, is a cardinal error, which also forms the basis of all systems of socialism.

Though these two theories lead us by apparently divergent paths, yet they both show us the same view of the future. They picture to us a social state in which, either from the abundance of wealth or from the moderation of their desires, men will work less. Then, as the Greeks did in the Market Place or under the Porch, the hours taken away from material labor will be devoted to political life, to relaxation in the way of art, to gymnastics, and to the noble speculations of high thinking. The only difference will be that what was formerly the privilege of the few will become the portion of all.

Unless we are altogether to despair of the future of mankind, we must hope that that will be the case some day; but it may be long before that day shall dawn. We cannot reckon upon the limitation of wants, for we have already seen that man's wants are from their very nature capable of indefinite extension, and that they increase in direct ratio to individual development. Still less can we make sure of an unbounded multiplication of wealth, for we are cognizant of the current illusions with regard to progress, and are too well aware that in spite of all this progress the quantity of wealth that exists is ridiculously insufficient, and that even in those societies which are the most proud of their knowledge

and the most vain of their luxury. The human race is still like Robinson Crusoe in the first years of his solitude on his island. The day has not come for them to rest. When a sufficient amount of articles of subsistence has been acquired to maintain those who still lack them, then indeed mankind may have the right to prefer repose to labor. It should not be forgotten that in the world at this present moment there are something like a thousand millions of men who are more or less unsupplied with the necessaries of existence. Would that we had but to provide for the wants of the present generation; but alas! our numbers are ceaselessly increasing, and the end that we seek shrinks from our grasp into the future.[1]

[1] We might quote in this connection the concluding lines of Antipater's epigram (Anthology, ix, 418):

"γευόμεθ' ἀρχαίου βιότου πάλιν, εἰ δίχα μόχθου
δαίνυσθαι Δηοῦς ἔργα διδασκόμεθα."

BOOK III.

CONSUMPTION.

I. How Wealth can be employed.

The theory of consumption has to deal with the various uses that can be made of wealth, and has to show us in particular what are the economic as well as the moral reasons which should lead us to choose the respective modes of employment.

Such a question may appear to be somewhat difficult to answer, for at first sight the uses that we can make of wealth seem to be infinitely varied. However, a nearer glance easily convinces us that all these diverse modes of employment can be readily classed under a very small number of heads.

Let us study the probable action of Robinson Crusoe, say with regard to a few grains of corn picked up by him in the neighborhood of his cave. He clearly had to choose between the three following courses : —

He might eat the grains of corn, *i.e.* employ them immediately towards the satisfying of his wants.

He might sow them, *i.e.* employ them for the production of further wealth.

Thirdly, he might do nothing at all with them, *i.e.* keep them and put them aside as a reserve for the future.

Similarly, each man living in society can employ wealth in one or other of these three ways. There is no other possible mode. We say this in spite of the following suggestions : —

It might be said that a man might destroy his wealth, *e.g.* by throwing it into the sea. But generally speaking the personal interests of the owner are a sufficient guarantee that he will not

resort to this possible mode of action. However, the public welfare demands that the legislator should be armed with powers to prevent such destruction. These powers are exerted in certain instances: if a man sets fire to his house or his crops, he is amenable to law, and, in France, the spendthrift who wastes his capital may be restrained from so doing, on his relations appealing to the tribunals. It is possible to think that too much leniency is shown in these matters owing to the superstitious respect which lawyers have for the sacred rights of property. Still, our subject in this place is the employment and not the destruction of wealth.

It might be argued that the man could give his wealth to another. Certainly he might; but then the recipient will be put in the giver's place, and will, in his turn, be restricted to a choice between the three ways of employing wealth that we have set forth above. The transfer of wealth by donation or otherwise has nothing to do with consumption. We shall treat of it when we come to speak of distribution.

However, in consequence of the inevitable intervention of money in social relations, each of our methods takes on a special aspect and receives a particular name.

The act of employing wealth for the satisfaction of our wants is called *expenditure*, and every act of consumption is practically effected by expenditure.

There are some exceptions to this; *e.g.* the case of the peasant who himself consumes the produce of his own plot of ground. Still, if he keeps his accounts in the ordinary manner, he will not fail to place under the head of his expenses (at any rate by a convenient fiction) the products which he consumes as they are yielded him by the earth.

The act of employing wealth for the production of further wealth is called *investing;* to invest money is to employ it in productive undertakings.

Thirdly, the negative act of abstaining from making an immediate employment of wealth, *i.e.* by laying it by, is called *saving*, or rather *hoarding*, for, as we shall see, the term "saving" is also used to signify investing, and therefore leads to ambiguity.

CHAPTER I.

EXPENDITURE.

I. What should be our Conception of Expenditure?

In popular speech "to spend" means to take money out of one's pocket and pay it away. Still, we should not call spending the purchase of stocks and shares, of estates, and of houses; such would rather be termed investments. Nor should we put under the heading of expenditure the purchases of raw material made by a manufacturer, the seed and the manure bought by the agriculturist, the stock of goods laid in by the tradesman or warehouseman, or even the wages that such employers pay out to their workmen. We should say that they were *advances*.

The term "spending," then, is applied only to a certain class of purchases, to the purchase of objects or of services which are *exclusively intended for our own personal consumption*. Food, clothing, house-rent, furniture, servants, travel, all that is devoted to the immediate satisfaction of our wants, — that is the meaning of the word "spending" or "expenditure."

Of all the modes of employing wealth, this is undoubtedly the most popular and the most favored by public opinion.

We can easily observe the severity with which popular sentiment has always judged those who save, and the bountiful indulgence it has ever kept in stock for those who spend. The Roman Church put avarice in the list of the Seven Deadly Sins, but it did not reserve a place for extravagance. There is not a novelist, there is not a playwright, who has not mercilessly ridiculed the miser, and many of them have expressed their sympathy for the prodigal.

In country places, in every village the man who saves is disliked by his neighbors, and on the slightest pretext would be treated as

a public enemy. The man who spends enjoys all the pleasures of popularity. But why is this? The first man you meet will enlighten you; he will say that no doubt the man who saves looks after his own affairs well enough, but that he does not benefit the business of his neighbors. By laying by his income, by keeping his fortune for himself, either in the shape of money, as was practised by the miser of the Good Old Times, or as sound, profitable stocks and shares, as is the custom of the thrifty man of to-day, the man who saves acts as an egotist; others do not share his fortune; *no one makes a farthing by him.*

On the other hand, the man who spends *makes trade brisk.* The money that he spends or even wastes is a shower of manna to tradesmen, workmen, and producers of every kind. "If the rich do not spend much, the poor die of hunger." That was said by no less a person than Montesquieu. Even if the spendthrift comes to ruin, though every one thinks that it is sad for him, there is the consoling reflection that there is nothing lost, and that others will necessarily gain by his downfall.

Nevertheless, since we have stated that in the long run all expenditure takes the shape of consumption, we must therefore conclude that all spending implies *the destruction of a certain quantity of wealth.* The reason why this feature of expenditure is not sufficiently regarded, lies in the fact that here, as in other matters, people think only of money. Now it is obvious that money that is spent is not destroyed; it is merely transferred from one person to another; that is what we can see, to speak *à la Bastiat.* However, some wealth has been actually destroyed, *i.e.* that which the spender procured by means of his money: this is the fact that we do not see.

Take the case of a great ball which has cost a thousand pounds. No doubt these thousand pounds will reappear again. They are not lost. They have certainly passed out of the hands of the giver of the ball, and have gone to his ball contractor and tradesmen. But what will never be found again and is really destroyed is the wealth supplied to him by his tradespeople. These have alto-

gether ceased to exist, whether at his house or in their stores. The cakes and sweets are eaten, the candles are burnt out, the flowers are faded, the dresses have lost their freshness, and so forth; in a word, there are a thousand pounds' worth of wealth to strike off from the sum total of wealth possessed by society.

Still, we must make allowance for certain extenuating circumstances with regard to expenditure.

The articles that we buy are not always annihilated by the circumstance that we use them. Clothes last several months, furniture some years, houses some generations; and it is the privilege of works of art, such as statues, and other works in bronze and in marble, and pictures, to afford us the same enjoyment during the course of centuries, and indeed almost for an indefinite period. In such cases expenditure evidently loses its destructive character, for not only does the money spent remain unconsumed, but the same is the lot of the commodity acquired in exchange for it. In accordance with this, when any one buys a valuable piece of furniture, or fine plate, or good pictures, people are wont to say that he has made a good investment. Still, in any case such an expression is inaccurate, for, though this expenditure is not destructive, yet it cannot be called productive, and in that respect it must always differ from an investment in the correct acceptation of that term. Nevertheless, when a collector buys some old chipped pottery at the auction rooms, and pays £100 for it, such expenditure, though perhaps a foolish act on the part of the spender, does not constitute any real destruction of wealth.

Again, in many cases, a certain quantity of wealth is consumed, but, nevertheless, the value of the wealth destroyed is far from being equal to the sum total of the expenditure. This occurs whenever, for any reason, an article is bought at a price which is much above its real value, value in this instance standing for the object's cost of production. For example, when a lady pays £50 for an ordinary dress, merely because it is made in the workroom of a fashionable dressmaker, the amount of wealth

actually consumed is obviously worth much less than the £50 paid. We must measure it by the value of the material used and by the amount of work done by the seamstresses and makers-up; in other words, it is probably less than a quarter of the price paid. No doubt the £50 are altogether lost by the lady who has spent them, but they are not lost as regards society taken as a whole. They are only transferred to the account of the dressmaker.

It therefore follows (as John Stuart Mill remarks with much subtlety) that the spendthrift does not really squander so much wealth as we might be disposed to believe, and, even if he has not a farthing left, we are not to think that he has swallowed up all his fortune. A goodly proportion of it still subsists in the hands of all those who have profited by his folly; *e.g.* his tradesmen, his stewards and bailiffs, his servants, perhaps even his friends, who have won money from him at the card-table. All this is so much saved from the shipwreck.

II. How it happens that Expenditure regulates but does not feed Production.

A glance at the economic organism is enough to show the intimate relations between production and consumption, and to indicate how far the former regulates its pace according to the speed of the latter. Whenever consumption increases, production displays a redoubled activity; a stoppage or slackening of consumption causes dulness of business. It is only a step further to conclude that consumption is the real cause of production, and that the more there is consumed, the more there is produced. The unthinking public readily takes this step forward, and asserts that in order to produce we must consume much; in other words, spend much.

Yet a deep abyss separates the two ideas. The enunciation of the fact is correct enough; the inference drawn is absurd.

It is obvious that the production of commodities is determined by the desire we have for them, though this is not identical with

consumption, which is only the satisfaction of that desire. If we have a keen desire for anything, we shall endeavor to produce it in as large quantities as possible; if we no longer care about it, we shall turn our efforts elsewhere.

But it is also obvious that to desire a thing does not create it. We must also have the means of producing it. Matters would be otherwise did our will possess creative power. Unfortunately it does not. As we are aware, the creation of wealth requires a certain amount of labor, of raw material, of land, and of capital. Now all these requirements cannot possibly be increased either by our expenditure or by our consumption; on the contrary, they can only be diminished by them.

Were any one to say that the more fruit we plucked the more our orchard would yield, the more fish were netted the more the sea would supply, the more wood we burnt the higher and thicker would be the forest trees, we should instantly perceive the absurdity of such a train of argument. Why should we laugh? Because we clearly see that the productive power of these natural agents does not depend on our consumption. Still, we do not consider it ridiculous to say that the more ribands we consume, the more ribands will be produced. But why not? Because if we desire this product more than another, manufacture will speedily find the means of satisfying us, by diverting to this branch of industry the labor and capital previously employed on other productive undertakings; and thus the production of ribands will grow *pari passu* with the consumption of them. Yet, however keenly we might have desired them, however large a quantity we might have been disposed to consume, these ribands would never have been produced save for the prior existence of the necessary factors in all production; namely, a certain number of workers, a certain amount of capital. The number of those who labor, it does not lie with us to increase; the amount of capital we certainly can increase, but in what way? By spending? Surely not. On the contrary, by saving. Production, then, is fed not by spending, but by saving.

The following figure will make the matter clearer: The amount of wealth existing in a country at any particular moment should be represented, not as a mass of water enclosed in a cistern, but as a running stream which is ever renewed, being fed by the two springs, land and labor. Now many people think that the more water is drawn from the brook, the more water there will be. That is impossible, for each of these springs has only a limited supply, and if many persons draw water therefrom as often and as freely as they like, the rest of the community will be obliged to go on short commons.

III. The Real Aims of Expenditure.

It would be ridiculous, from the fact that all spending generally leads to a destruction of wealth, for us to infer that each one of us ought to try to consume as little as possible.

For all wealth is destined to be consumed; in fact, is made only for that purpose. As the French word implies, *consommation* means the accomplishment or consummation of the whole economic process; it is the final end aimed at by production, circulation, and distribution. The only *raison d'être* of saving is to insure fuller satisfaction for future consumption. When, in our recent example, Robinson Crusoe sowed in the ground the handful of grains saved from the wreck, instead of eating them outright, he did this so that he might be able to eat ten times as many the next year. Always to save, in order never to consume, would be the most futile occupation that mankind could possibly turn to.

On the other hand, we must not lose sight of a point we have had frequently to dwell on. The quantity of wealth that exists in the world is still extremely insufficient, and the human race is scarcely any richer than Robinson Crusoe was on his island. Under these circumstances it may be to the interests of society, as well as part of the duty of every individual, to husband these precious resources, by reducing as far as possible the portion expended in unproductive consumption, and by devoting the greatest possible part to the production of new wealth.

We should therefore divide into two portions each man's private income, and also the collective income of an entire country. One part should be for spending, the other for saving. In all civilized societies this division is spontaneously effected, though the proportions are very unequal; for it is rare, even in the most advanced countries, for the amount devoted to saving to reach a tenth of the whole revenue. The annual savings of France and of England approximately attain this proportion, for they may be reckoned as between £80,000,000 and £120,000,000 sterling, out of a total of £1,000,000,000 to £1,200,000,000. The reason is that there is a great inequality in potency of the respective motives that incite to spending and stimulate to saving.

It would be no less important for us to be able to determine scientifically the legitimate aims of spending. Although the problem is not susceptible either of a rigorous or even of an universal solution, still it may be wise for us to state certain leading principles upon which economists have come to agree.

Firstly. Every act of spending that has as its result some physical or intellectual development of mankind, should be regarded not only as being good in itself, but also as being preferable to saving. For how could man better use wealth than by employing it to fortify his health and develop his mental powers? From this point of view wholesome food, good clothing, a healthy house, comfortable furniture, and instructive books, are expenses which should not only extort our permission, but should also receive our recommendation. Indeed, such may be said to be the best of all investments, although, no doubt, when men seek to obtain as good food and housing as possible, their general aim is merely to procure some personal gratification; nevertheless, this consumption tends indirectly to increase their capacity for work and their productive power, and thus produces in the long run the same result as saving.

Above all, such should be the direction taken by public expenses; for we must never lose sight of the fact that they, in the same way as private expenses, constitute a destruction of wealth.

But if this wealth has been consumed with the view of developing the education of our citizens, as by schools or libraries, of strengthening their bodily health, as by public gardens, hospitals, public baths, or gymnasia, or of forming their taste, as by museums, concerts, or even theatres, such expenditure seems fit to be beyond criticism. But even then we must be careful to provide no more luxury than is absolutely necessary for the attainment of the end in view.

Secondly, Conversely, all expenditure that tends to the opposite result, *i.e.* that is of a character to injuriously affect the physical, intellectual, or moral development of man, deserves the condemnation of the economist as well as of the moralist, for sooner or later it weakens productive power. The most striking example of expenditure of this nature is the consumption of alcohol in our own European lands or of opium in the East. The French, who drink, on the whole, less alcoholic liquors than most other nations, consume yearly about 33,000,000 gallons of brandy. These are sold retail in about 10,000,000,000 "nips," at a penny each, and amount to an annual expenditure of about £40,000,000 sterling. Even this enormous expenditure is relatively a trifle when compared with the incalculable losses that it brings in its train, in the shape of incapacity for work, disease, madness, crime, and suicide. Far more alcohol is consumed in Russia, in Germany, in Belgium, in Holland, and in Switzerland. Still, it is consoling to find that this consumption has been perceptibly reduced in Norway, England, and the United States, by means of the action of temperance societies. In fact, the "drink" question is one of the questions of the day.

We must also characterize as harmful every act of spending which does not answer to any want of man, and which, therefore, is a purely foolish destruction of wealth. In this category must be placed such acts as that related by J. B. Say; viz. the case of the man breaking wineglasses at dessert, "in order that every one may be able to live." The livelihood of society was not one jot directly impaired or improved by such an action. The only con-

sequence was that an hour had to be wasted in making another wineglass, to compensate for the wanton folly of this crack-brain. Cleopatra's wine did not gain a richer "bouquet" from the pearl she dissolved in her glass; Æsop's dish of the tongues of birds, which had all been previously taught to speak or to sing, certainly tasted no better than a dish of the tongues of birds which had not acquired such pleasure-giving accomplishments. The cardinal idea at the bottom of such acts is spending for spending's sake — spending which is treated as an end instead of as a means, combined, perhaps, with that inane satisfaction which some people obtain from the pleasure of mere destruction. But there is no need of recondite examples of this. Every man who drinks a glass of beer when he is not thirsty, or smokes a cigar with no pleasure to himself, and only with the idea of "doing as others do," destroys wealth on a small scale, in exactly the same manner as was done by the Queen of Egypt, or by Æsop the actor. Nay, my phrase "on a small scale" is inaccurate; for if we could reckon up all the wasteful acts of consumption in one single country, acts which have not even the excuse of affording the slightest enjoyment, we should find that they amount to a far higher sum than the value of Cleopatra's pearl.

What is a IV. Luxury.

Even supposing the observance of the principles that we have enunciated, our problem would still be far from being solved; for what are we to say of those multifarious expenditures which, without directly contributing to our physical or intellectual development, tend, nevertheless, to make life more agreeable, by instilling into it greater comfort and more refined enjoyments?

This will be seen to propound the celebrated problem of *luxury*, which has been an eternal subject of controversy among economists as well as among moralists.

Perhaps it may be thought that a necessary prelude to this subject should be a definition of luxury. Such an opinion is

well-grounded, but unfortunately the idea of luxury is not susceptible of any precise definition. The word "luxury" expresses the idea of a double disproportion — a disproportion on the one hand between the private fortune of a person and the expense he incurs, and on the other hand between the expenditure made and the satisfaction obtained. Luxury, in fact, is to devote a sum of money, or, more scientifically speaking, *a relatively large amount of labor, to the satisfaction of a relatively superfluous want.*

On this, as on almost every other great question in political economy, we find the field disputed by two opposing schools.

According to one school, all expenses in the way of luxury fall under the head of such expenditure as should be condemned in the name of economic science, even if not prohibited by positive laws. It is well known that, both in ancient times, as well as in the Middle Ages, expenses of luxury have frequently been prohibited by *sumptuary laws* (an account of which may be found in the second volume of Roscher's *Political Economy*). The school under review lays down that, as the quantity of existing wealth is insufficient even to satisfy the primal wants of the large majority of our fellow-creatures, we should endeavor to increase this available store as much as ever we can, and should refrain from drawing on it in a reckless manner in order to satisfy superfluous wants. Further, the productive powers that we can use are, as a matter of fact, limited; and therefore, if the wealthy classes divert a portion of these forces towards the production of articles of luxury, there will be so much the less available for the production of those staple articles that the masses require for their consumption.

To this the opposing school replies that luxury is an indispensable stimulus to progress; that, really, all economic progress is first manifested in the shape of a need of luxury, and that luxury, therefore, is a necessary phase of its development. Every want or need is, on its first appearance in the world, necessarily regarded as superfluous; firstly, because no one has hitherto felt it, and secondly, because its satisfaction probably requires a consid-

erable amount of labor, on account of man's lack of experience of the corresponding industry, and the inevitable gropings in the dark that attend all beginnings. Among the articles that nowadays are regarded as indispensable we must certainly place body linen. "To be reduced to one's last shirt" is a proverbial phrase, expressive of the last degree of destitution. Yet history teaches what, indeed, we might have easily guessed, — that at certain epochs a shirt was considered as an object of great luxury, and sometimes served even as a royal present. It is the same with every other article that we might choose to notice. If, then, the principles of the first school had been applied with sufficient vigor to repress every desire for luxury, all the needs that constitute the civilized man would have been nipped in the bud, and we should still be in the condition of our ancestors of the Stone Age.

The tenets of the first school are set forth by M. de Laveleye, in his work on *Le Luxe*, and those of the second school are contained in M. Leroy-Beaulieu's *Précis d'Economie politique*. The opinions of those who hold an intermediate position may be found in M. Baudrillart's four volumes on the *Histoire du Luxe*.

Still, in our opinion there is no necessary contradiction between these two theses. It is possible, at one and the same time, to condemn all expenses in the way of luxury which entail an excessive squandering of productive power, and also to accept, or even favor, every new want which answers to a new invention, or tends to enlarge the range of the human senses. To fit up a telephone in one's house is certainly an act of luxury; nevertheless, the use of this invention is especially capable of making life easier, through economizing time, and diminishing the difficulties and the griefs occasioned by separations of relatives and friends. Further, the only means of putting this instrument within the reach of all is to first extend its use among the wealthy classes. The conclusion is that those who can afford to incur this expense act wisely in so doing. But, on the other hand, when a lady of fashion wears on her ball-dress some yards of lace, which must have cost the lace-maker several years of labor, or when an Englishman of title, in

order to give himself the proud pleasure of affording grouse-shooting to his sportsman guests, turns into game preserves acres and acres which might have supplied several hundred human beings with food, — in such cases we have the right to declare that wealth has been culpably misused. The interests of progress have nothing to do with it.

But an objector may ask, "Do you think that if English aristocrats were to dismiss their armies of servants, abandon their vast pleasure-parks and shooting-grounds, close their stables, give up their packs, and drink less claret and port, the condition of the English working poor would be improved in any form or shape?" Certainly we do. The army of workmen would be reinforced by those dismissed from a service of idleness; cultivable land would be increased in extent by the tracts that would thus be restored to it; kine or swine would be fattened with the food hitherto given to horses or dogs; and, above all, the capital of the country would be augmented by all that the "upper ten" would henceforth cease to consume. Now if all the elements of production were increased in this wise, the quantity of wealth, too, would necessarily be augmented; were wealth more abundant, it would be more easily obtained, and the condition of the lower classes would be improved in like proportion.

A word or two may be necessary as to art. Should art be held to be a luxury? Undoubtedly it should, from the economist's point of view; but of all luxuries it is the one that he can regard the most favorably, even according to a strictly economic criterion. The point to consider is not whether £24,000 has been paid for a picture such as Millet's "L'Angelus," but whether this picture has required an amount of labor or of capital which is disproportionate to the pleasure it can give to the purchaser and others. Now it is evident that the picture has absorbed a relatively minute amount of wealth and of labor. For what has been consumed in its painting? A yard of canvas, a few tubes of colors, and a few weeks or months of one man's labors (the labor of two or three, perhaps, if we include the models). The result is a work

which, on account of its unlimited powers of durability, will be able to give the most exquisite delight to all succeeding generations for a thousand years hence, or even longer. Here surely the effort made is not disproportionate to the result achieved.

However, there are certain forms of art which require a great consumption of wealth; for example, the architecture of the Pyramids of Egypt, a Gothic cathedral, or such a theatre as the Paris Opera House. These are more justifiable forms of expenditure, for they are instances of *public* luxury.

It is also true that every high art always involves a greater waste of productive power than any other form of production, since for every artist of genius we must always reckon, say, a hundred others, who have missed their mark and are "failures." Their labor, therefore, is wasted to no purpose.

V. The Expenditure of Foreigners.

Although what a Frenchman spends in France constitutes a destruction of wealth for his country, the expenses incurred by foreigners are not to be looked at in the same light. No doubt a foreigner, also, destroys by consumption a certain quantity of material wealth, but he brings in exchange an equivalent amount of money, and the country he visits loses nothing thereby. This, of course, proceeds on the supposition that he draws these funds from his own country; for, if he spends this money out of the interest on capital he has invested in France, or out of rent from land which he holds in France, his expenditure, as far as its effects are concerned, will clearly be indistinguishable from the expenditure of a native Frenchman.

Is it enough to say that the country loses nothing? Ought we not rather to affirm that it gains? Such, in truth, is the popular opinion. The expenditure made in a country by foreign residents or tourists is usually regarded as a source of wealth for the country. In Switzerland, Italy, Nice, and Paris the foreigner is the proverbial goose that lays the golden eggs. Economists, for their

part, have no scruples in treating such opinions as mere prejudices, and in declaring that this expenditure is sterile and cannot in the least increase the wealth of the country. Which are we to believe?

The economists urge that foreigners, in exchange for the money which they bring into a country, consume an exactly equal amount of wealth, and that therefore the country considered as a whole neither loses nor gains, though particular districts or industries may incontestably obtain some benefit. It is admitted as a matter of course that the presence of foreigners in any locality will attract thither not only people, but also capital, and that excellent business will be done by hotel-proprietors, keepers of livery stables, photographers, and so forth; but the economists proceed to say that as these workers and this capital are diverted from other parts of the country, other industries must surely lose just as much as these will gain.

But is it quite correct to say that foreigners in exchange for their money always consume an equivalent amount of wealth? It is not true in all cases.

In the first place, it is not true whenever a foreigner is cheated; *i.e.* whenever he is obliged to pay far more money than they are worth for the articles that he consumes; in such cases he clearly pays a kind of tribute to the country that he is visiting; in other words, a poll-tax is levied on him. Making all due reserves as to the morality of such proceedings, still we must observe that such exactions have become hallowed by usage, and there are few towns frequented by foreigners in which there are not two sets of prices, one for foreigners, the other for the natives.

Again, the dictum of the economists is not true whenever the wealth in question is from its nature neither consumable nor destructible. When a foreigner purchases the right of enjoying clear skies, of breathing pure air, of gazing upon picturesque scenes (and this he does whenever he rents a villa or hires a carriage or engages a guide), he does not diminish the wealth of the country by the slightest fraction. On the contrary, he literally pays rent to the country, precisely the same rent as accrues

to any landowner who holds the monopoly of some natural advantage. Why, indeed, should not glaciers like those of Switzerland, coasts like the Riviera, waterfalls like the Norwegian, museums and old ruins like those in Italy, — why should not all these be sources of wealth for the respective countries just in the same manner as coal mines or forests are?

It may be rejoined that these are unproductive goods. Without doubt they produce nothing for mankind in general, save a particular form of enjoyment, but they clearly return an income to the country that has discovered a means of profiting by them by allowing foreigners to use or merely view them on payment of a certain sum. If there is any curious object on my estate and I put barriers round it and impose the payment of a shilling upon any passer-by who is inquisitive or interested enough to wish to view it, no doubt the revenue of the country will not be increased thereby, but my own income will be powerfully increased at the expense of the pockets of the tourists. But, if I am obliged to make an enclosure of the spot or have to pay a person to look after it, then there will obviously be expenses to deduct from my returns. Similarly, the expenses incurred in building villas, and the services rendered by guides, coachmen, and ciceroni in charge of tourists, evidently represent an amount of capital and of labor which have to be deducted, but in the end a net profit may remain over.

Further, we hear the following argument urged: the only effect of this supposed gain is to augment the quantity of money in circulation in the country, and this increase of money confers no real advantage. As the coins become more abundant, they will lose some of their purchasing power and prices will rise. That is all the gain!

More than once already we have had occasion to explain our position with reference to this theory that it does not matter to a country whether it has much or little money. In the present instance it is enough to observe, that, if Englishmen have been willing to give France some thousands of pounds, merely for the

pleasure of residing at Paris or at Nice, France is perfectly free to exchange this money for an equal value of English goods; and such goods will be an increase of wealth for which France has paid nothing.

This afflux of money must be regarded as particularly advantageous when a country has experienced a scarcity of coin, either through an excessive circulation of paper money, or when the balance of trade has been unfavorable. The continued flocking of foreign tourists into Italy is certainly one of the circumstances that have aided that country in getting rid of her paper money, and of returning to payment in specie.

However, it is further to be observed that, as we cannot set up a continuous current of coin from one country to another, and as the equilibrium between exports and imports always tends to re-establish itself, the expenditure of foreigners will, if the situation be much prolonged, be paid, not by remittances of specie, but by foreign goods imported into France.

That is certainly accurate; but such a position will not be actually effected till the country has become sufficiently provided with money in the shape of coin.

VI. The Means of reducing Expenditure.

There is only one way of reducing expenditure without reducing consumption (for the latter course would lead us to trench on the province of saving); this mode is association.

If several persons join together for the purpose of having only one house, one hearth, or one dinner-table, in that way they will be able to obtain the same amount of satisfaction with far less expense.

Daily instances of this are given by the maintenance of religious votaries at convents, of soldiers at barracks, of boys at boarding-schools.

But what is the reason for this? It springs from those very causes that make production on a large scale so much cheaper

than isolated production. We are already familiar with these causes, and by modifying them a little we can easily transpose them from the region of production into the sphere of consumption. The enormous savings that can result from consumption in common, especially as regards attendance, housing, cooking, have been vividly and picturesquely described by Fourier in his *Traité de l'Association domestique agricole*, and by his follower, Considérant, in his *Destinées sociales*.

From this circumstance communists are ready to conclude that the kind of life heretofore led by human societies, viz. family life in isolated groups, involves excessive expenditure and a real waste of wealth. To replace this family life by life in common would, in their opinion, be a great step in advance, and a great benefit to mankind. Fourier, in his description of his phalanstery, has set forth this idea with more energy and vigor than have been displayed by any of its other exponents.

Unfortunately, though life in common possesses the incontestable advantage of bringing about much saving, on the other hand it has the mischievous effect of doing away with family life, of destroying the domestic fireside; in a word, of annihilating that "home" which constitutes one of the first needs of man, and is one of the principal charms of existence. Human nature has always revolted against life in a mess-room, or even at a *table d'hôte*. Fourier, no doubt, may think otherwise; he says in his *Association domestique agricole*, Vol. II, page 25: "A *pater familias* on reading this sketch will say, 'My pleasure is to dine with my wife and children; and whatever happens, I will keep this agreeable custom.' He is altogether wrong in his opinion. Just at present, his habit pleases him, because he has no better one; but when he has had two days' experience of the customs of Harmony, he will send to the fold his wife and children, and they for their part will like nothing better than emancipation from the melancholy family dinner." We must not forget, when we read this passage, that Fourier was an old bachelor.

We should lose sight of the very aim of wealth, the whole scope

of which is to afford us enjoyment, if we were thus to sacrifice, to a desire of living a little more economically, all the conditions of private happiness and one of the factors of human existence that most powerfully strengthens morals. Then, in fact, we should have to repeat the poet's saying, "*Propter vitam, vivendi perdere causam.*"

But without binding ourselves to actual life in common, — *i.e.* the obligation of sleeping under the same roof and dining at the same table, — we can still obtain at least a portion of the advantages of consumption in common. This result has been achieved, both by the institution of public kitchens (*fourneaux economiques*), which prepare food in large quantities, but allow consumers to carry home their dishes if they prefer, and in smaller measure by the establishment of consumers' societies which confine themselves to buying staple articles of food wholesale for distribution among their members. When we speak of saving, we shall refer again to this institution. Here we may remark that these public kitchens exist in a large number of towns, and are very beneficial to the poorer classes. The "portion" of soup, or vegetable, or meat, already cooked, is usually sold for 1*d.* or 1½*d.* The prices in London have been further lowered by the employment of huge ovens which cost a little over or under a thousand pounds apiece.

CHAPTER II.

SAVING.

I. What should be our Conception of Saving?

In popular speech the word "saving" has a perfectly definite sense: it simply expresses the fact of abstaining from consumption, of "laying by" some wealth.

The term can scarcely be applied except to one kind of wealth; viz. the precious metals, especially when in the form of hard money. For in order that riches may be "laid by," their nature must be suitable to that action; in other words, they must be able to "keep." Now, only a few articles of wealth satisfy this condition. Most wealth rapidly deteriorates, and that process is often more speedy when the article is not used than when it is used. Furniture and cloth fade; linen becomes torn, and grows yellow in the press; iron rusts; articles of food spoil, or are eaten up by insects; even wine, after first improving, is at last injuriously affected by being kept.

This simple idea of saving (viz. "laying by") has been complicated by economists who have introduced the notion of investing into that of saving, and reserve the word "hoarding" for a mere accumulation of wealth. Now, nothing authorizes such a distinction, neither facts nor logic. Facts do not, for it does not necessarily follow that all savings are invested; on the contrary, they often end by being used up. Logic does not, for it is not accurate to denote by one and the same expression two operations which are not only distinct, but are altogether contradictory. "To save" means not to consume wealth, whereas "to invest" signifies, as we shall see, our handing over wealth for consumption by others. The former excludes the idea of con-

sumption; the latter necessarily implies it. Hence arises the ambiguity of the word "saving," and this double meaning has contributed in no small degree to the obscurity of the matter.

In this chapter, then, we shall use the word "saving" as a simple expression of the fact of not consuming wealth, and of putting it in reserve, as a synonym of hoarding, if that be preferred.

We have already seen that public opinion, which is so favorable to spending, is exceedingly hostile to this mode of employing wealth. The man who pays too much attention to saving is regarded as a miser unless, indeed, far stronger epithets are applied; and it is taken for granted that the money he lays by is so much bread which has been stolen from the workers.

However, even if we take saving to mean hoarding, even if we reduce it to the simple fact of restraining consumption and of conserving a certain quantity of wealth, it is hard to see how such acts can be considered inimical to the interests of society; on the contrary, the reverse is true. Every piece of money should be regarded as an "order," or ticket, which gives its holder the right of deducting from the total quantity of existing wealth a certain amount which is equal to the value of the coin. The man who saves — that is to say, the man who locks up this coin in a drawer — merely declares that for the present he will abstain from exercising his rights and from deducting his portion. Surely he is free to do this; he injures no one. The share that he might have consumed will be consumed by others, until he or his heirs, or those who have borrowed from him (if he ever decides to invest his money), come in their own good time to use these orders.

Is he reproached with withdrawing from circulation a certain quantity of money? The statement is a true one; but that money is not lost; it is not even damaged. Sooner or later it will emerge from its hiding-place. Meantime, the only possible effect of this disappearance of a certain quantity of money, if indeed the sum is large enough to produce any perceptible effect, will be a provisional lowering of prices, or, as the end of all, an advantage for consumers and for the poor.

No doubt, if this putting by of wealth is without any object, or if its only object is the pleasure of now and again gloating over the treasure-casket and the gold it contains (and this is the characteristic trait of all miserly Harpagons), then, indeed, the act is worthy of all the sarcasms with which misers of every age have always been riddled. But even then, though the act is a foolish one on the part of the performer, it is perfectly inoffensive from a social point of view, far more inoffensive than the doings of the spendthrift. It could only be susceptible of real damage to society when it is practised with regard to objects which are not capable of being kept, and when the consequence would be an actual destruction of wealth. We might instance the miser in Florian's fable, who was in the habit of keeping apples till they were rotten, and

> "Lorsque quelqu'une se gâtait
> En soupirant il la mangeait."

But when hoarding is made with regard to money, and that is really its only form, the above disadvantage is not to be feared.

Still, we must acknowledge that, though the popular prejudice, which ranks the spendthrift far above the "miser," lacks any economical basis, it is not without justification from the point of view of morals. For avarice, or even excess in saving, denotes a strong love of money; whereas prodigality betokens a certain carelessness with regard to, and a certain contempt of, this vile metal. To quote a popular saying which is equally expressive and picturesque, the wastrel is a "money killer." As the thirst for gold, *auri sacra fames*, is the fountain-head of innumerable evils, popular prejudice might obtain some justification in that quarter.

However, there is no manner of doubt that in most cases saving has some actual end in view; it is either to make an investment, *i.e.* to serve for the production of new wealth; or, at the very least, to form a reserve fund wherewith to face certain necessities and to combat unexpected contingencies.

In these, which are the normal conditions, saving is not only an act which is highly intelligent and meritorious on the part of the

agent, but further, it is extremely beneficial to society, and we could not dispense with it without plunging ourselves into certain ruin. We know, in fact, that it is impossible to create new wealth without the assistance of a certain amount of pre-existing wealth; in other words, without capital. But where is society to find this capital? Precisely in that very portion of wealth which has not been consumed by those who might have consumed it: to those persons society cries, "I see you do not need this wealth! Lend it to me, so that I may employ it in the production of further wealth!" And saving men comply with this request. If it ever unfortunately happened that every member of a particular society had consumed all that he had the right to consume, and that therefore no more wealth was available for new production, in that case production would be compelled to stop.

II. The Conditions Necessary for Saving.

There are two conditions which are necessary for saving, — the *possibility* of reducing one's consumption, and the *willingness* to do so.

Firstly. To be able to save — *i.e.* to put in reserve a certain amount of wealth — it is, first of all, necessary that the quantity of wealth at one's disposal should be at least large enough to satisfy the necessities of existence. Unfortunately this primary condition is lacking in the case of the great majority of mankind. No doubt man's wants are so elastic that they may be regarded as indefinitely compressible; and a person whose sole income was a pound of bread per day might perhaps accustom himself to eat only every other day, and might thus save half. But, whenever saving takes the form of a charge upon man's necessaries, or even upon his legitimate wants, it is disastrous rather than useful. Let us repeat here what we said a few pages back. Man can employ wealth in no better way than by devoting it to the development of his physical, intellectual, and moral faculties; and this holds good, even from a purely economic point of view.

It therefore follows that saving is, in a way, a luxury which is scarcely procurable except by wealthy societies, and even in these it can be only obtained by those who are in easy circumstances; that is to say, by the minority. In fact, saving is the special social function of the rich.

The opinion is constantly repeated that nothing would be easier for workmen than to save, since they readily find the means of spending many thousands of pounds in nothing but brandy and tobacco. No doubt they would do much better if they took to the savings bank the sums that they devote to such useless or baneful consumption; but they would do better still if they employed this money in giving themselves and their families more healthy homes, more sanitary clothing, more wholesome food, more frequent medical care, more complete education, and so forth. This consumption of brandy and tobacco is not taken from workmen's spare money, as is often supposed, but is most usually subtracted from what should pay for their bare necessities. It may be said "then they are so much the more culpable." That is likely enough, but the sermons we may wish to preach them should be based less on the text "save" than on the text "distribute your expenditure better."

Secondly. It is not enough to be able to save. The *will* to save is also necessary, and this second condition is no less difficult to fulfil than the first one. All saving, inasmuch as it implies a reduction in consumption, also implies some suffering, or at any rate, a privation or a sacrifice; and no man is disposed to wantonly inflict a privation on himself.

Now, it is clear that the sacrifice demanded by saving varies very greatly according to our respective share of this world's goods; and that it may, in a way, pass through all the degrees between zero and infinity.

For the man who possesses scarcely more than the bare necessaries of life, saving is altogether impossible, or is an exceedingly painful operation; for, so to speak, it presupposes the amputation of some essential want.

On the other hand, for the man who possesses a superabundant quantity of wealth, saving is no longer a sacrifice. A sacrifice! nay, it may even become a necessity; for in the long run, there is a limit to every man's powers of consumption, even though they be those of a Gargantua. A term must come both to our wants and to our desires, and Nature herself has fixed the line by placing satiety on the limiting point.

Every man, then, who thinks of saving is held back by the consideration of the larger or smaller sacrifice that he will have to impose on himself; but, in an opposite direction, he is exercised by the thought of the larger or smaller advantage that he expects from saving. He has to weigh in the balance two wants, — a present want which he ought to refuse to satisfy — say the hunger which is pressing him — and a future want which he would like to satisfy by due provision — say the desire to have bread for his old age. His will oscillates between these two conflicting forces; and according as one or other is the more powerful, in that direction will he make up his mind. (We pointed out the same conflict between the same forces when we were discussing labor.)

This faculty of thus striking a balance between a present want and a future want, and of looking at both of them as present in the view of the mind's eye, is called by its true name, "foresight." But we must not think that this faculty is possessed by every one. For, observe that the present want is a reality; we perceive it physically; the want that is yet to come is a pure abstraction; we only perceive it by means of our imagination. We therefore require special habits of thought and will to accustom us to abstraction, and such can only arise in a somewhat advanced state of civilization. (See Bagehot, *Economic Studies*, "The Growth of Capital.")

Our occupations, especially in these latter-day societies, and our training, oblige us constantly to take thought for the future. Men of science, seeking to penetrate the secrets of times to come, politicians, anxious for the morrow, financiers, who have plunged into speculation, ordinary business men, who are occupied with

the bills that fall due at the end of each month and the inventory of their stock that they make at the close of each year, — all of us unconsciously, but still in greater or less degree, have become familiarized with this unknown future, and have come to see that it is an item which we must take into account. But that requires an intellectual effort which is beyond the reach of the savage, who is only conscious of each pressing need, and who, to use Montesquieu's celebrated phrase, fells the tree in order to gather its fruit. Such an effort is even hard to those of our fellowmen whose social condition most closely resembles the position of primitive peoples. Hence it happens that the want of foresight, or improvidence, is the characteristic feature, both of savage races, and of the lower or depraved classes of our modern societies.

It is clear that the greater and the more palpable the advantages to be obtained from saving, the more strongly will each man's will be bent in the direction of saving.

Now the prospect of being able to invest our savings with complete safety, and of drawing from them a greater or less amount of interest — and such a prospect is easily realized, thanks to the laws and institutions of the present day — should obviously act as a powerful stimulus to saving. As we shall see, one of the strongest arguments that can be adduced in favor of interest is to represent it as a premium or bounty on saving. But to regard it as a *sine qua non* of saving, as is done by most economists, is to err on the side of excess. If some decree based on collectivist principles were to abolish interest to-morrow, no doubt there would no longer be any person who would be disposed to lend his money, but there would still be people who would save ; for, as we cannot repeat too often, investment is not the sole end of saving. Perhaps, indeed, owing to the very fact that saving could no longer be renewed and increased by interest, men might be led to make even greater accumulations of money than they do now. That might be harmful rather than beneficial. The foregoing supposition is not hard to prove. Let us suppose that a man wishes to insure for himself from the age of fifty, and for his children after

him, a sum of £200 a year. Thanks to interest, he need only save a capital of £4000. Were there no such thing as interest, if we reckon twenty years for himself and only thirty years for his son after him, he would have to save a sum of 50 times £200, or £10,000.

III. Institutions for the Facilitation of Saving.

In all civilized countries there are varied and ingenious institutions for the purpose of facilitating saving, which are due sometimes to the initiative of legislators, sometimes to the independent action of private persons. The two most characteristic forms are *savings banks* and *consumers' societies*.

Section 1. Savings Banks.

Savings banks are institutions which are intended to facilitate thrift, by taking charge of sums that have been saved. The service they render the depositor is to place his savings in safety as regards robbers, and perhaps even more so as against himself.

For the best way to preserve growing savings is to take them out of the keeping of their owner, in order to prevent him from yielding too easily to the temptation of spending them. An ingenious application of this idea is the "money-box," which is so well known to French children as the *tire-lire*, an earthenware jar, into which coins are dropped through a tiny slit. To regain possession of the coin the jar must be broken; and though that is not hard to do, this slight obstacle is thought to be sufficient to give time for reflection, and to enable the child to strengthen himself against temptation.

The savings bank is only an improved "money-box." No doubt the small sums deposited therein can be used by the depositor at his own discretion; still, they are neither in his hand nor in his pocket. In order to recover them, certain formalities must always be gone through, and, in any case, more time is required than is occupied by the breaking of a "money-box."

In order to encourage saving, depositors are also guaranteed a small interest by these banks; but this interest should only be regarded as a sort of premium on, or stimulus to, saving, and should never be too high. The business of a savings bank is not to serve as an investment institution. (Thus in France the maximum sum that can be deposited has been fixed at £80; in our opinion this limit is too high, and it would be better to return to the former maximum of £40.) Its object is to enable people to lay by a little money for emergencies, or even to form a small capital. But, when once this capital has been got together, and the depositors wish to invest it, *i.e.* to make it yield returns, in that case the money ought to be returned by the savings bank, which has played its part. Other institutions will now take charge of such capital; viz. those which we have examined under the head of credit societies, banks, *Credit-Foncier*, and so forth.

We may note that in France savings banks are instituted either by private persons, or by municipalities, or by the State, in which latter case they are held only at post-offices. But all alike are compelled to pay the funds that they receive into the office of deposits and lodgements ("Caisse des dépôts et consignations"); in other words, into the State coffers. Although this requirement of the law is intended to afford perfect security to depositors, it has been sharply criticised, and not without reason. In the first place, by placing in the hands of the government a sum that is now not far from £120,000,000, and that is yearly increased by an amount ranging between £8,000,000 to £12,000,000, it swells beyond due measure a debt which is all the more dangerous, inasmuch as it is always payable on the earliest demand, and besides laying heavy responsibilities upon the government also exposes it to dangerous temptations. Again, when once these moneys have been swallowed up by the maw of the Treasury, they absolutely cease to be of any further use, though they might be easily employed to more advantage. Thus, in Italy, where these savings banks are remarkably well organized, the greater part of the receipts are devoted to loans to landowners or to agricul-

turists. As the interest paid to depositors is very low, only a small interest need be asked from agriculturists; and this is a priceless boon to agriculture. Meantime, the depositors enjoy approximately the same security.

Section 2. Consumers' Co-operative Societies.

The object of the institutions which are called consumers' co-operative societies (*sociétés co-opératives de consommation*) is to facilitate thrift by doing away with that element of privation which we have already pointed to as a condition inherent to all saving. They succeed in solving that apparently insoluble problem, and in creating "automatic saving" by means of a mechanism which is as simple as it is ingenious.

A larger or smaller number of persons join together to buy in common, and therefore wholesale, all or part of the articles that are necessary for their consumption. These goods, which have been bought at wholesale prices, are then re-sold to its members by the society, at retail prices, and the gain which is realized on the difference is at the end of the year distributed among all the members according to the amount of their purchases. For example, if a member has bought £20 worth of groceries during the year, and the society has made a profit of 10 per cent, at the end of the year he will find that he has effected a saving of £2 which will have cost him nothing; I mean that he has not been obliged to reduce his consumption in anything. He has consumed as much as before; he has had goods of better quality; their price has not been dearer, or it has been even cheaper, than what he would have had to pay the shopkeeper at the corner of the street. In spite of all this, he has saved; and the more he has bought, the more he has saved. Thus people have been able to say, in a kind of witty paradox, that a way has been found of effecting a saving by means of spending!

The origin of these institutions begins with the ever-famous history of the Rochdale Pioneers, in 1844. Since then they have undergone a remarkable development in all countries, but espe-

cially in England. In that country these societies reckon no less than a million members (that is to say, a million families, or a seventh of the population). They do business to the amount of £36,000,000; and the savings which the working classes have thus been able to make yearly exceed £4,000,000. In France, too, especially during the last few years, a number of these societies have formed a federation after the English fashion. They hold yearly congresses, and have founded a wholesale store to supply provisions on a large scale to syndicated consumers' societies.

The object assigned by some of these institutions is merely to *reduce expenses*, and not to effect a saving. In these cases they sell goods to their members at the cheapest rate possible; *i.e.* at the cost price. This is a very inferior form of association, and is open to criticism in several respects. It usually prevents the society from expanding its business, and always exasperates the retail trade.

On the contrary, other of these institutions have a loftier end in view. One object is to *gradually do away with the middlemen* between the producer and the consumer, and thus free society from an overwhelming burden; another is to *progressively emancipate the working classes*, by giving them the means of accumulating a huge capital, which will enable them to found producers' co-operative societies, and to carry on a victorious struggle against capitalist industry. The English societies now possess about £5,000,000 in invested funds. This accumulation of capital is an item in the programme of the French federation of co-operative societies. We shall speak of this further on, when we deal with co-operative societies of production.

CHAPTER III.

INVESTING.

I. What should be our Conception of Investing?

To invest wealth is to employ it productively; to invest corn, we must sow it instead of eating it; coal must be consumed in the furnace of an engine instead of being burnt on the grate of our hearth; a horse must be yoked to the plough, not harnessed to a carriage; and money must be made to yield returns, and not be merely spent.

It follows from the above examples, as it would from any other instances that might be given, that investing, just as much as saving, is a *mode of consuming wealth*. There is only one difference, but that is a great one: spending is a consumption which merely serves to afford us some enjoyment, whereas investing is a consumption that aids in the reproduction of new wealth.

When money is the article in question (and our examination of the various modes of employing wealth is almost entirely confined to this form), investing may take two different shapes. The man who wishes to give productive employment to his money can choose between the two following courses: —

Firstly. He can lend this money to some one who will make use of it. He can do this either by lending it directly by means of a mortgage or other ordinary business loan, or by buying credit papers in the shape of government stock, railway shares or debentures, etc. It is this mode of employment which is usually referred to wherever "investment" is spoken of.

Secondly. His other course is to devote this money to the direct establishment, on his own account, of some commercial, industrial, or agricultural business; or he can build a house in

order to let it. This, too, is a mode of investing his money or, at any rate, of making it yield returns.

In either case the money which is thus invested receives the name of capital, and it deserves that name; for (except for accidents or miscalculations) it produces or ought to produce an income for its owner under the form of interest, dividend, arrears, profits, or gains.

It is true that investments are not always productive for those who have made them, and even less so for society at large. For instance, at least three-fourths of the 30 milliards of francs (or £1,200,000,000 sterling) which have been lent to the French government since the beginning of this century, have only been used to fire cannon and kill many men, an occupation which can scarcely be called intrinsically productive. Inasmuch as these 30 milliards of francs are totally unproductive as regards the country, how is it that each year they return about £40,000,000 to their owners, *i.e.* to holders of government stock? The explanation is exceedingly simple. The State yearly levies on the incomes of the tax-payers, that is to say, on the product of the labor of all Frenchmen, the £40,000,000 which are necessary for the payment of the interest on these ruinous transactions. To act honestly it could scarcely do otherwise, for, *qua* borrower, it is bound by a contract.

On the other hand, the £400,000,000 which have been put into railways, the £40,000,000 devoted to the piercing of the Suez Canal, and other even more fortunate investments, have been employments of wealth which have been highly productive, not only for their investors, but for the country too, and even for mankind. Surely, then, the most useful employment of wealth from a social point of view is to invest.

This, however, is not the popular opinion; it is usually thought that the man who spends his money makes trade brisker, and gives workmen more work to do, than the man who is content to invest it; and at any rate, when the investment consists in buying securities, which are to be locked up in his safe or docketed. This

is imagined to be only a form of hoarding. Those who reason after such a fashion have really no idea of the real meaning of investment.

Let us suppose that a man devotes his money to buying railway debentures — say in the *Paris-Lyon-Méditerranée* — and purchases these from the company direct over the counter at their offices. (I say "direct"; for if the security is bought on the Bourse, there is only a simple transfer.) Our capitalist is merely substituted for the former holder of the stock, and in that there is no productive employment from a social point of view. Still, we must observe that the capitalist who has sold his security will also be obliged to find some productive employment for the money he has received in exchange; and probably he has effected this sale precisely because he had some other employment in view. To return to our buyer from the company direct. He hands over to the company the value of this stock in money. Now what will they do with his money? Will they lock it up in their strong-box? Surely not, for then they might have abstained from borrowing it. They will use it for the purchase of coals, of rails, of sleepers, for the payment of their employees, of the workmen who make their engines, of the navvies who construct, and the plate-layers who repair, their lines. It would be the same with every other imaginable form of investment. The money is spent even when it is lent to the State, though then not usually in a productive manner. But certainly the government borrows it, because it requires money for the payment of its contractors, for the manufacture of muskets, and so forth. In any case, then, the invested money will be spent by those to whom it has been lent, if not by the owner himself. It will, therefore, do good to trade, and will be used for the purchase of goods or the payment of workmen. But, instead of being spent unproductively, it will be expended in a productive manner.

Before proceeding further we must answer a possible objection. It might be said, were each man to make it a rule to invest all his money, then no one would consume any more, or, at any rate, consumption would be restricted to the bare necessaries of life.

In that case, are we not obliged to conclude that production must stop, and that henceforth there would be no more industrial undertakings, and no more work for any one?

In the first place, this objection is a contradiction in terms, for every investment necessarily supposes production. If, then, production had to cease, all investing would become impossible; and capitalists would be obliged, willy nilly, to revert again to consumption. Moreover, those who argue in this fashion forget that investing can only be the act of a minority, the act of those only who have more than they require. Thus no great harm would be done, if on an otherwise wild hypothesis, all rich people were to take to living on dry bread and cold water. No doubt, in consequence of a lack of demand, there would be a cessation of the production of articles destined for consumption by the wealthy classes; but commodities necessary for the consumption of the masses would still continue to be produced. Again, as the production of such articles would henceforward be the only outlet for the investments of the rich, it would thereby be powerfully stimulated. These articles would become far more plentiful in the market. They would consequently be far less dear, and all people would be benefited.

Still, there is one thing that may differentiate invested money from money that is only spent. Perhaps the former may be expended further off, outside the owner's country. This circumstance has prevented people from clearly perceiving that the invested money is spent. Say that with his savings the capitalist buys Panama debentures, then the money he has saved may perhaps go to pay negroes or Chinese coolies; whereas, if he had spent this sum, it might have directly benefited the workmen of his own country. In this regard, the latter have some grounds for complaining. Still, it is enough to remark that, if the savings of the French do aid in providing work for foreign laborers, in a reciprocal manner the savings of foreigners may come to be invested in France, and give employment to French workmen. Thus a compensation may be effected up to a certain point.

In order that no obscurity whatever should rest on this important subject, we must now eliminate money; for it is clear that in these operations money is only a symbol, and that of itself it can produce nothing.

A subscriber for a railway debenture of £50, which is to yield him £3 in interest, might use the following language if he knew any political economy: "Here are £50 worth of tickets which give me the right of deducting an equal value from the whole sum of existing wealth to supply my own consumption. Now, for my part, I prefer not to exercise this right. I therefore hand these 'tickets' over to you; and by means of them you can exercise the right I have refused, and levy that amount of wealth in coal or iron, or whatever you may require for your production. Or if you pass on these 'tickets' to your workmen in the form of wages, they may be able by means of them to obtain the commodities which are necessary for their existence. However, as I do not intend to make a present, either to you or your workmen, of that portion of wealth which was mine by right, I stipulate that you shall give me £3 as interest on the new wealth you may produce by your own work or by the labor of the men in your employ."

To sum up: to spend your money is to consume a certain quantity of wealth on your own account; to invest your money is to *transfer to others your rights and your power of consumption.* No doubt this transfer is not gratuitous; but still we can see the absurdity of the prejudice which believes that to invest is to keep for yourself, and that to spend is to distribute among others. We can also observe the profound truth of John Stuart Mill's sentence (*Political Economy*, Book IV, sect. 9), "A person who buys commodities and consumes them himself does no good to the laboring classes, and it is only by what he *abstains* from *consuming* that he benefits them."

Socialists declare that this transfer is like the distribution of shares made by the lion in the fable, and that it really means the robbery of the workers. When we discuss the subject of profits, we shall be able to examine this statement. But, even admitting

that the levy made by the capitalist is exorbitant and unjustifiable, in any case it will always leave some scraps over for the workman; whereas, if the capitalist consumed all his capital himself, there would not be a crumb remaining.

II. The Conditions Necessary for Investing.

These conditions are two in number, — the confidence that we shall get our money back again, that is to say, *some security*, and the prospect of *some gain to be made*.

1. Let us consider the security first of all. In order to invest his savings, *i.e.* to give them productive employment, a man must give them up; he must hand them over for reproductive consumption; he must agree to their destruction. Now no one will consent to this unless he firmly believes that this wealth, of which he provisionally deprives himself, will not be lost, but will return to him augmented. Security, alone, can give us such an assurance: first, *political security*, which guarantees us against the confiscations of an oppressive government, against revolutions from within and invasions from without; next, *legal security*, which guarantees our rights over the capital we have invested, by the aid of all those juridical institutions whose aim is to assure the carrying out of contracts, securities, mortgages, concessions, and legal powers; finally, *moral security*, which consists in the progress of public morality and the fidelity of all of us in keeping our engagements; without this, indeed, all the other guarantees would be certainly insufficient.

In an absence of this security, those who have saved will not consent to let their capital pass out of their hands, and will prefer to keep it by means of a hoarding, which is sterile but free from danger. Hence it happens that we see so many cases of hoarding and so few instances of investing in troubled times like the Middle Ages, or in countries without regular government, like those in the East. Under such circumstances the only employment that is available for capital is trade in articles of luxury, for

as these possess great value in small bulk, they can be transported and concealed with ease. Even land, then, fails to present the conditions necessary for this desired security; for, though it cannot be destroyed, it can be confiscated, pillaged, and ground down with taxes. On the other hand, the present day offers to would-be investors a thousand resources which were unknown to our fathers; for investments are innumerable, and very many of them are perfectly safe. In 1815 only *four* securities were quoted on the Paris Bourse; in 1888 there were 767, without reckoning hundreds more which were quoted either in the departments of France or on foreign Bourses.

2. Some gain must be made, either in the shape of the profits, properly so-called, that are realized when a man turns his money to account himself, or as interest when he lends it to others. For if invested capital were to return to its owner just as it had left him, it would not be worth while to part with it, and it would have been simpler to keep it. As we have shown above, the extinction of all interest would not necessarily do away with all saving, but it would certainly put a stop to all investing.

However, it would not be right to infer from this, that the necessary result of a fall in interest must be a restriction of investing; on the contrary, it should stimulate investment. People usually save in order to make sure of a certain income that shall be enough for them to live on, let us say £400 a year. If the rate of interest is 5 per cent, the attainment of this end will require the investment of a capital of £8000; but, if the rate of interest falls to 2 per cent, the capital necessary for the same result will be £20,000. Under such circumstances it is almost certain that the fall in the rate of interest will act as a spur which will incite men to work longer and save more. Still there is a limit, though it is difficult to fix; if the rate of interest were to fall to one-tenth per cent, and, therefore, it were necessary to save a capital of £400,000 in order to assure an income of £400, it is probable that no one would invest henceforward; for the immense majority of people would think that so poor a result did

not deserve the trouble of temporarily dispossessing themselves of their money. They would continue to save all the same for the purpose of satisfying future wants, but instead of employing their savings productively, they would be content with putting them away in a safe place and with consuming them day by day according to circumstances.

We need not now devote a separate chapter to the study of the institutions for the facilitation of investing, as we did when treating of saving. In our days numberless facilities are afforded to people who wish to invest their money: there are industrial or financial enterprises, especially in the form of joint-stock companies; there are undertakings dealing with agriculture or landed property, notably those carried on by means of the *crédit foncier;* and there are the constant borrowings of the State, particularly the issuing of public loans.

BOOK IV.

DISTRIBUTION.

PART I. — THE VARIOUS PRINCIPLES OF DISTRIBUTION.

CHAPTER I.

THE SOCIAL PROBLEM.

I. Is there a Social Question?

THE distribution of wealth comprises all those topics that are now, by common agreement, called social questions, or, in brief, *the* social question. This is none other than the ever-present subject of the rich and the poor.

But is there a social problem? The liberal school formally denies it, and refuses to hold that the question is a reasonable one merely because it has been debated for a thousand years or so. The question of perpetual motion has also been discussed for centuries. This school says that there is no social question, if we mean by that the problem of determining how wealth should be distributed among men; and it is a singular fact that the great classical economists, Turgot, Adam Smith, J. B. Say, and Ricardo, neither discussed nor even enunciated the problem of a better distribution of wealth. It is altogether irrational to attempt to make men happy by any *a priori* formula, even were that formula the expression of ideal justice. We cannot distribute wealth, for it distributes itself in virtue of natural laws which men have not invented, cannot change, and have no motive to alter; for, taking all in all,

they approach the largest measure of justice that we can hope to expect from any social system. In fact, the automatic working of these laws enables each member of modern society to be remunerated *in proportion to the services rendered* by him.

The method is as follows: Every man offers to the public what he possesses; the landowner his crops, the manufacturer the product of his labor, and he who possesses nothing offers his bodily strength or his intelligence. The value of this commodity or of this labor power is determined in the market by the ordinary laws of value which amount to this well-known principle: things have more or less value, according as they answer to a more or less intense desire felt by men, according as they are able to satisfy more or less imperious wants, according as they are *more or less useful*, to employ that term in a wide sense. Thus, when we say that each man's remuneration is determined by the value of the articles he can supply or of the kind of labor he can offer, we mean that his share in the distribution of wealth is proportional to the amount of social utility he has supplied; *i.e.* to the services he has rendered. That is the formula which the school of Bastiat loves.

Withal it is ingenious, and is quite convincing to those who only desire to be shown that the existing order of things is excellent; but its insufficiency is palpable if we merely recapitulate our theory of value. The reasoning would be correct were the value of things determined by labor, or even by social utility, understanding by that the actual aid given to the labors of society as a whole. But that is not the case. The value of things is determined by a body of complex causes, which are usually summed up in the law of supply and demand, — a natural law, no doubt, but, by that very circumstance, as foreign to any idea of justice or morality as, say, the law of gravity.

Take an example. Compare a miner, who is paid three shillings a day for extracting coal, with a *diva* who receives £160 a night for singing at a theatre. If we ask why the former, who produces the bread of manufacture, is paid a thousand times less than the

singer who only affords a passing pleasure to a few *dilettanti*, the school of Bastiat will reply boldly, "Because she has rendered to society a thousand times greater service than the miner has, and the proof is that society consents to pay her a thousand times more. Society may be wrong, but the price it pays is our only mode of estimating the value of services rendered to it." We might also be reminded of the repartee made by a great singer to the Empress Catherine, for complaining that she dared to ask for a higher salary than her marshals received: "Very well, then, get your marshals to sing!"

In all this there is clearly a play upon the word "service." The fact that the singer is paid far more highly than the miner does not show that she has aided society in a more useful fashion, or even that the kind of satisfaction she can give answers to the more intense wants of men in general; it only shows that it satisfies the desires of a small number of men. It further proves that it is easier to find men to act as miners than it is to discover opera singers with their throats constructed in a certain manner. Similarly, a picture signed by a celebrated name may, as was recently the case, fetch the price of £30,000, if it excites the desire of any *one* wealthy man.

Our example was a fancy one, but many others may be lighted on everywhere. Two farmers take exactly the same amount of effort to bring to market sacks of corn of identical quality, and therefore of equal value as regards social utility. If one of the farmers has the good luck to see his neighbors' crops damaged by hail or frost, the remuneration he receives will be ever so much higher. An English nobleman, who owns much property in London, allows contractors to build houses on his land, at a rent which he increases at each renewal of the lease, in proportion to the rise of the value of land and of house rents. It is clear that his remuneration, which amounts, perhaps, to a million pounds, is determined quite naturally by the law of supply and demand, but it is not so easy to see how this remuneration is proportional to the service rendered. Even if we call it his "service" allowing

people to live on his land, it is not easy to perceive the reasons of justice or of social utility which have granted the noble lord the pleasant privilege of rendering his fellow-men services which are so dearly paid for.

We may be told that this mode of distribution is *natural*, though we can trace in most countries historical, and, in a way, artificial causes, such as conquest or oppressive laws, which have greatly modified distribution. If we are told that this mode of distribution is *necessary*, we shall accept the dictum in a certain measure, for we shall find that the system is not easy to replace. But let us not be told that it is founded on a principle of justice. We must repeat that present distribution is based on the law of supply and demand, which of itself is neither moral nor immoral, and which is as perfectly indifferent to all our thoughts of justice as the sun which shineth on the just as on the unjust. That is why there is a social question. Men refuse to accept a social order which is independent of all ideas of justice, and their efforts will ever be directed to putting things as they are in conformity with things as they ought to be.

II. The Inequality of Wealth.

To the general public the clearest and most appalling fact in the distribution of wealth is its inequality.

We may even say that men daily find this inequality the more unbearable, in proportion to the successive breaking down of all the other inequalities which used to separate them one from the other. Modern laws have realized civil equality; universal suffrage has given political equality; the growing diffusion of education is tending to introduce the reign of a virtual intellectual equality. But the inequality of wealth still remains: formerly it was hidden, as it were, behind even deeper inequalities; now, however, it is seen in the foreground of our democratic societies, and against it dash the waves of public wrath.

However, if inequality were the only vice to be found in the

present distribution of wealth, the evil would not be so very great; in reality, it would not be an evil at all.

If there be any fact which possesses in a high degree the characteristics of a natural fact, it surely is inequality. Science does not authorize us to believe that we shall ever succeed in effecting its disappearance, and certainly does not advise us to make the attempt. On the contrary, it assures us by the mouth of its most competent, or at any rate its best accredited, representatives that inequality is as indispensable for the development of the human species as it is for that of all other species, and that it is the *sine qua non* of progress. Thus Professor Schmidt declares that "Darwinism is the scientific basis of inequality"; Haeckel says that "in the life of humanity, as in that of plants and of animals, only a small minority ever succeeds in living and in developing"; and Herbert Spencer asserts that "all arrangements which tend to do away with any difference between the higher and the lower are diametrically opposed to the stages of organization and to the coming of a higher life."[1]

Even if we confine ourselves to purely economic ground, we are told that the inequality of wealth is an excellent, perhaps the only, stimulus to production; for from the foot to the top of the social scale it keeps all classes moving with the prospect of some kind of advancement; it alone can develop individual initiative to its full extent by concentrating powerful amounts of capital in the hands of a few able persons; finally, it alone can give fruitful variety to men's labors by means of the unbounded gamut of wants and desires that it establishes between them. It is only in the wealthy classes that a new want can be stirred to take its rise, and thence by the force of imitation it is gradually spread right down to the lowest strata of society.

All this is true enough, but the question remains unsolved, for there is inequality and inequality. There is a beneficent inequality

[1] The German Socialists have clearly recognized the need of coming to terms with Darwinism. See, for example, a series of papers on the subject in the *Neue Zeit* for 1890. — J. B.

which stimulates the progress of human society and prepares the way for a higher life for all; there is also a baneful inequality which paralyzes the development of the social organism by allowing a class of parasites to live at its expense. The inequalities which characterize modern society must now be assigned to one or other of the above classes.

Three characteristics are necessary for inequalities to produce the salutary effects which are expected from them: they ought to be in a certain relation to the *services rendered;* they ought not to be *excessive;* they ought not to be *permanent.*

For when the inequality of fortune bears no ratio to the inequality of services rendered, when, instead of springing from natural causes, it arises from artificial causes such as past conquests or laws which have long been oppressive, it keeps up in the social organism an irritation and a state of discomfort which the flight of time does not cure, but renders more acute.

When the inequality becomes permanent and, as it were, preordained, when it creates classes, when the children of the rich are destined to be always rich and the offspring of the poor always poor, then its results are injurious even as regards productive activity. It discourages those who are at the bottom of the ladder, for they are deprived of all chance of ever climbing it; those who are at the top it lulls to sleep in the security of an acquired position. Those who are too poor are prevented from laboring, because they are no longer able to produce; those who are too rich do not work, because they have no longer any desire to do so. Thus are engendered those two evils which have for years afflicted society; their names are *idleness* and *pauperism*, and both alike end in unproductive consumption. In thus perpetuating these two classes of parasites, the one at the top, the other at the bottom, of the social scale, extreme inequality goes diametrically against the natural selection which is so much extolled to us.

When the inequality of fortunes becomes excessive, in its train follow a whole series of inequalities which revolt the public mind

and disturb the public well-being; when the poor man is very poor he is necessarily a prey to ignorance, vice, crime, disease, and premature death. Be it remarked, moreover, that it is the smallest inequalities which stir men's minds the most keenly; great inequalities may excite envy, but the hopelessness of overcoming them negatives all emulation. The small peasant proprietor will work hard to make his plot as large and as compact as his neighbor's; but he will not labor a moment the more from seeing the squire's seat, for he knows that he will never own it.

Almost all the above grievous features still exist in modern society, though they are less marked than they were in ancient times.

The inequalities which are seen in the distribution of wealth greatly exceed in their proportions the inequalities which result from nature. The differences which may exist between the height of a giant and of a dwarf, between the muscular power of the strongest and of the weakest man, probably even between the intellectual capacity of a man of genius and of a person of limited intelligence, if they could be measured by some dynamometer, — all these would be seen to be but trifling when compared with the enormous difference that may exist between the poor man and the rich man. Most rural families in a country like France (which is one of those in which easy circumstances are the most common) have to be content with an income less than £40; but there are fortunes in the world that can only be reckoned by millions. William Vanderbilt, the American, left a fortune which was estimated to be rather more than £40,000,000. Thus that single man had an income equal to that on which 40,000 or 50,000 families might live. Now no one, not even Vanderbilt himself, would have dared to assert that his intelligence or his capacities were 50,000 times greater than those of the average of his contemporaries. Still he was in a certain degree a self-made man; whereas in England a few hundred peers held as their own, and have handed down from father to son for centuries, about half the land in England.

When it has passed certain limits, this inequality of fortune brings with it the other inequalities of which we have spoken.

Let us not talk of vice or ignorance, though they may, in large measure, be regarded as the fatal consequences of misery; let us only look at that possession *par excellence* to which it seems that all men should have equal rights. I mean "life." Alas! That, too, is most unequally meted out to the rich and to the poor; and statistics show that the average duration of life among the wealthy classes is twice as long as it is among the poor. Thus, by a cruel irony of fate, the smaller the share of wealth that falls to a man's lot, the heavier is the tribute that he has to pay to disease and death. Numerous statistical calculations show that in England the average duration of life among the wealthy classes is from 55 to 56 years; whilst for the working classes it falls to 28 years, or even lower. According to M. Loua (*Economiste Français*, 1882, I, page 179), the following would be the figures of the annual mortality in Paris: —

The rich and well-to-do classes .	156	out of every 10,000 inhabitants.
The poor	285	" 10,000 "

M. Leroy Beaulieu, in his work on the *Distribution of Wealth* (in the chapter entitled "Sisyphism and Pauperism") tries to establish a kind of compensation between the evils that result from indigence and those that proceed from disease and moral sufferings. He says: "What is the number of the poor when compared with that of the human beings who are afflicted with infirmities, with incurable or constitutional diseases, such as scrofula and phthisis? In particular, what is it when compared with the still larger number of men who are tortured with poignant moral sufferings? No doubt indigence is an ill; but to the thoughtful mind it is one of the most benign and least spread evils that have ever afflicted civilized societies." This eminent economist forgets that poverty of itself is a cause of most poignant moral sufferings, and a most active cause of scrofula and phthisis; and that therefore Fortune has not put in the two opposite scales of the balance the evils that afflict men, but appears, rather, to have heaped them together in one and the same scale.

In fine, the real complaint that can be urged against the distribution of wealth is not so much its inequality as our inability to perceive the reasons for this inequality. It is by no means proportional to the labor expended; on the contrary, according to John Stuart Mill's bitter remark, the scale of remuneration appears to descend further and further, the more laborious the work becomes, until finally it reaches a point where the most severe toil scarcely suffices for the necessities of existence. Still less does it seem to be proportional to men's merits or virtues. The antithesis between the man who is poor but honest, and the scoundrel who is fortunate and wealthy, is a commonplace which is as old as the world, but it never fails to be true in the present.

III. Why the Problem of Distribution is so hard to solve.

If wealth were in excess, it is obvious that the question of distribution would never arise, for then we might draw at our own free will from a fount that would never be exhausted. Do men ever wish to make a fair distribution of spring water? Yes, but only on the oases of the Sahara. But where wealth is deficient, the question of distribution does arise, and the smaller the amount to be divided, the more acute is the controversy. The survivors on the raft of the ship *Medusa* fought with knives for a crust of bread.

Though we are not exactly in that position, we are nearer to the second than to the first of our hypotheses. Contrary to the popular belief, the amount of wealth produced is small and insufficient, even in the professedly wealthy countries. Hence the acuteness of the problem of distribution and the difficulty of effecting a solution; for clearly the most skilful distribution in the world will never succeed in allotting large shares when the whole mass to be divided is small. It is easy to give an irrefutable proof of this. The sum total of the wealth that exists in a country such as France is reckoned to be £8,000,000,000, though some statisticians put it at £8,800,000,000, or even £9,600,000,000,

whilst others, whose calculations appear to be the most reliable, reduce the total to £7,200,000,000 or even £6,400,000,000. Let us take the first-mentioned figure and divide it by the number that represents the population of France, or 38,000,000; the quotient is a little over £210. If we were to suppose then that all the existing wealth were equally divided between all Frenchmen, each family (taking four persons to a family) would receive as their share a capital of about £800, half of which would be in land. Is it urged that that would in any case be better than the present situation? We must certainly recognize that it would be a very modest position for every one, and that it would be far more like poverty than wealth. If the same calculation were applied to England or the United States, virtually analogous results would be arrived at, but in every other country they would be far lower. Thus the total wealth of Italy is estimated to be only £2,160,000,000, and that would give a quotient of £70 per head, or about £280 for a family, and more than half of this would be in land. (Pantaleoni, *Giornale degli Economisti*, August, 1890.)

We may arrive at the same conclusion in another way by considering how few the rich are, even in the so-called wealthy countries. They never constitute more than an infinitesimal proportion of the population. According to M. Paul Leroy-Beaulieu, the number of millionnaires in France is 20,000 at the very outside, and that estimate appears to be confirmed by various observations made in those countries in which the establishment of an income tax allows of the drawing up of far more exact statistics. Thus in Prussia, in 1890, out of a population of nearly 29,000,000, there were only 232,477 families that had an income of more than 3000 marks, and merely 1260 families that had an income larger than 54,000 marks.

In Paris, in 1884, there were reckoned to be 758,981 dwelling-houses, and the rental of only 6672 of these was above £240; though the official valuation is generally about a third less than the real value. Nevertheless, as a wealthy family in Paris never

spends less than £200 or £300 on its rent, we can thus appreciate the small number of the rich, even in that great city where the wealthy of all parts of the world are wont to congregate.

All this shows the magnitude of the mistake made by the public, and by the greater part of the socialists, in imagining that to solve the social question it would be enough to cut off a portion of the share of the rich and increase the share of the poor by such parings. Even were it possible to carry out this crude and childish plan, it would only increase the income of the immense majority in a ludicrously small proportion; in an exactly similar way, if it were possible to distribute uniformly over the whole area of French territory the mass of all its mountains, Mont Blanc included, the surface of the soil would be raised only by a few feet.

People fail to see that the fact of there being so many men in the world who have so small a share of wealth does not spring merely from the unfair distribution of this wealth; the chief reason is that there is not enough of it. The gravity of the problem does not arise so much from the unequal distribution of goods — for that might be fairly easily overcome — as from their insufficiency.

The enunciation of the fact leads to this: whatever mode of distribution may be proposed, it should always be subordinated to the mode of production; however conformable the plan might otherwise be to the ideal of distributive justice, it should be sternly rejected if it might lead to a diminution of production. Otherwise the attempt at cure would aggregate the disease. The *sine qua non* is, "not to discourage productive activity." On this reef we shall find that all socialist systems founder.

The solution should comply with another condition which is partly bound up with the foregoing: "individual liberty must not be destroyed." Even admitting that it is possible to discover an ideal formula of distributive justice, should we not then require some recognized authority to assign each man his share, similar to the mother who cuts each child its respective piece of cake? Would not regulation in distribution necessarily entail regulation in production and in labor? Could the prescribed authority

count each man's sheaves at the harvest-home and still leave him free to sow and plough as he chose? That is scarcely probable; for, just as the mode of distribution is largely determined by the mode of production, so too the latter reacts on the former; in fact, they are inseparable. We should therefore require a self-acting and literally automatic mode of distribution, which would not need the constant interference of a distributive agency — such as the mode now in vogue, which we have briefly described. This second condition does not seem to be much more easy than the first one. Let us now turn to the solutions proposed by the various schools of socialists.

CHAPTER II.

THE SOCIALIST SOLUTION.

I. Communism.

Let us suppose, after the fashion of social reformers of other times, that we are transported into some new world, into some kingdom of Utopia; let us there make a clean sweep of everything that might interfere with us, — traditions, customs, or laws, — and then try to discover some principle of distributive justice that might serve us as a rule for the distribution of wealth.

But it may be urged, to begin with, what is the use of dividing at all? All sharing will cause further inequalities; why not then leave everything in common between the members of society just as between the members of one family? This is *communism*, the simplest and the most ancient of all the systems that have been proposed.

Very many authors have conceived more or less communistic theories; to begin with, Plato in the *Republic*, or Fénelon in his *Telemachus;* but the only ones who can be regarded as the leaders of a school are Gracchus Babœuf, Robert Owen, and Cabet.

Babœuf, who took the name of Gracchus because he believed that the tribune who obtained the passage of the Agrarian Laws was the inventor of equal sharing, was the leader of the conspiracy of the "Equals" under the Directory, was condemned to death, and was executed in 1797. He had set forth a regular plan of social organization in a programme which began with the words, "Nature has given each man an equal right to all things." But this movement was revolutionary rather than socialistic.

On the other hand, Owen, who was born in Wales in 1771

and died in 1857, was a great philanthropist, and at the beginning of this century paved the way, at his factory in New Lanark, for all the great philanthropic institutions of our own time; namely, limitation of the hours of labor, prohibition of child labor, workmen's co-operative societies, savings banks, provision stores, and even secular schools. But not content with this, he formed dreams for the organization of communist societies, and tried to found them in the United States in the year 1826 under the name of New Harmony. After a few years of success, the project fell through.

Cabet, the author of *Icaria*, one of those numerous romances which have imitated Sir Thomas More's *Utopia*, started in 1848 the society of Icarians, which still subsists in the State of Iowa. But it has been grievously troubled by intestinal quarrels; a few years ago it split up into two parts, and now it has only a very small number of members, seventy-five of whom belong to "Young Icaria." Moreover, its financial position is not of the very best.

Fourier, for his part, is wrongly classed among real communists, though he is generally reckoned as such. He was only a communist in the matters of consumption and production, and not so in the least as regards the distribution of wealth. To his mind life in common in the phalanstery was only a means of organizing production and consumption under more economic conditions, and its aim was certainly not to establish equality among men. In fact, as Fourier expressly said, it ought to leave untouched not only the inequalities that result from labor and talent, but those, too, that proceed from unequal returns to capital. Reference may be made to my little book on *Charles Fourier*.

To return: whatever may be said of it, communism is not a purely fanciful organization, for it has certainly existed, if not at the beginning of all human societies, as has been too positively asserted, at any rate at the foundation of a great number of them. (See Sir Henry Maine's *Village Communities in the East and West;* M. Viollet's *Le caractère collectif des premières propriétés immobilières,* and M. de Laveleye's *La propriété et*

ses formes primitives.) Of the many remains of this primitive condition we may instance that institution of public *symposia* which was so widespread in the cities of antiquity.

Even to-day, not to mention Roman Catholic bodies, the United States contain somewhat numerous and well-marked examples of societies which are altogether communistic, and some of these have already lasted for nearly a century. If their results have not been very great, their very existence has shown that community of goods is a social organization which is realizable under certain conditions. Reference may be made to Nordhoff, *Communistic Societies*, and Richard Ely, *The Labor Movement in America*. There are between 70 and 80 of these societies, with a membership of from 6000 to 7000, and all their property reckoned together gives a total which is by no means small, say £5,000,000 or £6,000,000. That would come to about £800 per head, a proportion which is far larger than the average share of wealth which a similar calculation would give for the members of the most wealthy of our civilized societies. (See above, page 407.)

Although the experiment has only been made on a small scale, yet it shows in particular that the communistic system is not absolutely incompatible with labor and production, as has been somewhat too hastily asserted. The members of these societies are usually men of the average amount of industry. No doubt they do not feel a stimulus equal to that given by private property, for each man works and produces on the behalf of all, instead of working and producing only on his own account; but, when this objection is urged against the communistic system, it is usually forgotten that in our modern societies this very stimulus is lacking for the great majority of men; namely, for all those who, in their capacity of receivers of wages, have to work only on the behalf of others. Now there is reason to believe that a member, who works for a society of which he himself forms a part, will put more zest into his work than the wage-earner, who only labors for an employer. Thus the argument is a double-edged weapon and cuts those who use it.

But the real cause of the discredit into which communistic societies have fallen is the fact that the conditions, which are indispensable for their success, are absolutely incompatible with the tendencies of modern societies. Proof of this can be afforded by a consideration of these conditions, such as may be observed in the few communistic societies which have prospered.

Firstly. Very small societies are required, whose members shall not be more than a few hundreds or a thousand. Communists themselves have understood this well enough, for Fourier fixed the maximum number of persons in his phalanstery at 1500, and Owen's figure was between 500 and 2000. Small numbers obtain in those societies that are observable in the United States. The most extensive of all, the society of Shakers, is subdivided into several communities, and the largest of these, that of Mount Lebanon, had rather less than 400 members in 1876 (see Nordhoff, *Communistic Societies*).

The reason for this is quite apparent; as the number of members increases, the interest of each member in the success of the society diminishes. When the society is very small, each man can gain in a certain measure by his own personal efforts; but in a communistic society which comprised all Frenchmen, each man would only be interested to the extent of one thirty-eight-millionth, and that fraction is far too minute to excite any one's zeal.

It would be useless, as some communists propose, to try to turn the difficulty by only establishing the community in the heart of the local parish, and by dividing a country like France into 36,000 of these. Nothing would be gained by that, for there would be rich districts and poor districts, and inequality of persons would thus be replaced by inequality of groups.

Secondly. We should require societies subjected to the severest discipline. For it is obvious that the equality which such associations demand is incompatible with all encroachments on the part of particular individuals with a view to consuming more than their share, and with all desire of emancipation so as to obtain relief from the task allotted them. The institutions where life in common

reigns — convents, barracks, and public boarding-schools — are those in which obedience is obligatory. The history of the Republic of Icaria offers us a wealth of instruction in this matter. We see the neophytes ceaselessly striving to shake off a rule which they found to be unbearable, and Cabet struggling in vain to obtain dictatorial power on behalf of the community. The comparative lack of success of this society was precisely due to the lax discipline observed therein.

We must also remark that in almost all cases religious feeling, pushed to the verge of fanaticism, has alone been strong enough to preserve in these communities that discipline which is indispensable for their existence. All the communistic societies in the United States, the Icarians alone excepted, are religious sects; and the republics formed by the Jesuits in Paraguay constituted a true theocracy.

But nowadays the minds of men are not at all inclined to accept the yoke of any authority whatsoever, least of all a religious yoke; when such a feeling is current, every system of communism seems doomed to fail. However, with a lack of logical consistency which is really amusing, the only socialist school which still preaches communism is the anarchist section. Still, this contradiction may be partly explained when we add, that the mode by which the anarchists wish to reconstruct society as a whole is the formation of a multitude of communistic bodies, which shall be free and autonomous.

II. Collectivism.

Collectivism is a milder form of communism. It proposes to leave undivided only the instruments of production, *i.e.* land and capital, and to divide the products according to certain rules that we shall study in the next chapter.

Unlike the other social schools, collectivism cannot altogether be connected with the name of any particular man.[1] Forty or fifty

[1] In the *Revue d'Économie politique* for January, 1891, Professor Gide gives César de Paepe the credit of inventing the name Collectivism. — J. B.

years ago Colins in Belgium, and Pecqueur and Vidal in France, first laid down that distinction between instruments of production and objects of consumption which is the characteristic feature of the system. But it received all the weapons with which it attacks the present organization of society from Ferdinand Lassalle, and even more from Karl Marx (by the publication, in 1867, of his famous book on Capital) : both of these, by the way, were Germans and Jews. Up to the present, however, the nature of collectivism has been negative and critical rather than positive and organic. Its object has been to demolish rather than to construct, and consequently we shall have to more particularly examine this system when we study the various social institutions (*e.g.* profits, dividends, wages, etc.). However, its plans for a future society have been set forth in Mr. Gronlund's book, entitled the *Co-operative Commonwealth.*

Collectivism has received the adherence of all present-day socialists, with the exception of the anarchists, who have remained constant to pure communism. It does not profess to be a plan for constructing a new society, based upon any *a priori* principle of justice. Its object, whether well-grounded or not, is to represent the state of affairs towards which modern societies are tending, being urged on, whether they will or no, by the laws of a necessary evolution. The partisans of collectivism assert that, in consequence of the development of large industry, wholesale trade, and the holding of extensive estates, in all our societies individual production is disappearing and is being replaced by collective production. Now, since all the instruments of production, mines, railways, ships, banks, and machinery, are daily passing from private owners into the hands of great limited companies, or sometimes of the State, we ought soon to witness the last stage of an evolution which will definitively divert all this class of wealth from the sphere of private property and will place it in the collective estate of society at large.

They hope that this nationalizing of all *active* wealth (I mean by that, wealth which is employed in production) will be enough to put to flight most of the vices of our present social organization.

In their opinion it would cause the disappearance of the extreme inequality by which we are afflicted; for the only cause of these inequalities is the accumulation of capital or of land in the hands of certain classes. This capital grows as speedily as a rolling snowball, through the laws of inherited property, by being lent out at interest, and by being made to yield returns. This latter process, according to Karl Marx's theory, is merely a mode of making profit out of other people's work. But, as soon as private individuals were inhibited from holding capital, this monopoly would have to vanish along with all its consequences.

Idleness would have to go; for as soon as no one could hold land or capital as his own, there would clearly be no longer any room for a class of persons of independent income who live on their investments or on their rents.

Pauperism would cease to exist; for society at large, as soon as it assumed the possession of all land and all capital, would be bound to provide work for all those who were able to work, and to guarantee at least the existence of those who were incapable of working.

In another way, as collectivism retains private property in articles of consumption together with the right of their free disposal, it seems to promise an avoidance of the dangers of communism and a complete assurance of individual liberty.

If we were to enter on a critical study of this system, it would demand long digressions. We must therefore refer the reader to M. Leroy-Beaulieu's book on *Le Collectivisme*, and to the numerous passages in which we speak of collectivist theories.

We shall here confine ourselves to observing that the distinction between instruments of production and articles of consumption, upon which the whole system of collectivism has been built, appears to be a very fragile foundation.

In the first place, this distinction is valueless from a moral point of view. The instrument of production, whether it be called capital or not, may be the product of labor just as well as any article of consumption, and may consequently fall under the category of

legitimate property. Common sense refuses to accept the notion that although the right of private property can be legitimately exercised on a carriage or coach, because that is an article of consumption, the smack and the nets of a fisherman may not fall under that right because they are instruments of production. True enough, collectivists may reply, and indeed have already replied, that they do not propose to confiscate capital which is merely used as an instrument of individual labor; they confine their proposals *to capital which enables its possessors to make other men work on their account; e.g.* factories, mines, and large farms. But then the distinction only comes to this, that large capital, and not small capital, will be confiscated; hence it loses all scientific value and becomes nothing more than a commonplace system of levelling.

Nor is the distinction more acceptable from a practical point of view. For we have seen that any articles of wealth may, on account of their different properties, be reckoned as capital as well as be classed among articles of consumption, and that the quality of being capital depends far less on the nature of the wealth than on the use that is made of it. Any article of consumption may become capital by the mere fact of being employed productively. Thus, by prohibiting private property in capital, the collectivist system merely arrives at this result; it refuses to allow private persons to use their wealth *productively*, and only grants them unproductive employments. For instance, it allows them to use corn for eating, but not for purposes of sowing. In this manner the result attained is a paradoxical one, and scarcely appears to be reassuring for the future of production.

It must further be remarked that in order to enforce such a prohibition, *i.e.* to prevent every person from freely getting profit out of that portion of wealth which has fallen to his lot, and over which even the collectivists recognize that he has a legitimate right of property, — in order to effect this, measures must be resorted to which are grievously harassing to liberty. The possessor must be prevented from selling his wealth, from lending it, from making it yield returns; but when the rights of property have thus been

mutilated of their most essential attributes, they will become merely fictitious rights, and we shall fall back into communism pure and simple.

If, on the contrary, collectivism is strict in respecting the liberty of individuals, if it means to leave their rights of property intact, at least over that share of wealth which it recognizes them to hold, the right of disposing of it for nothing or for an equivalent, during lifetime or after death, in that case, however reduced the amount of private property may be, it will be enough for the reconstruction in a few years of a social order which will scarcely differ from the existing order of things. In our opinion, then, collectivism is deluded in its hopes of finding the golden mean between communism and individualism, and will not escape the necessity either of plunging into the first or of going back to the second of these two systems.

III. The Different Formulæ for the Division of Wealth.

Inasmuch as community of goods is incapable of realization, and as we cannot remain in a state of non-division, we must certainly look for some method of sharing. Even collectivism has been obliged to search for one, if not for capital, at any rate to be applied to incomes.

But the problem is not an easy one, even when we transfer it to a purely speculative plane by putting away from us the memory of all precedents. It is useless to say that the division must be made conformably with justice; for what is justice? The rendering to each man of what is due to him, *suum cuique tribuere*. But that is precisely where the difficulty lies; how are we to determine what each man ought to receive? What criterion will enable us to fix this?

The special aim of the socialist systems has been to regulate the distribution of wealth according to certain principles of justice, and each respective school has identified itself with one or other of the four following formulæ: —

An equal share for each man.
Each man according to his wants.
Each man according to his capacities.
Each man according to his labor.

Let us examine each of these in turn.

Section 1. An Equal Share for Each Man.

We only mention this first formula for the purpose of showing that it was once used, for socialists themselves gave it up long ago; there are now no "sharers," in the literal sense of the word. The socialists, who "make for perfect equality," have ceased to be sharers, and have become communists, which is not at all the same thing. Nay, it is quite the reverse, for communism is not in the least a system of sharing; it is the negation of all sharing.

Still, it is probable that, on account of its simplicity, this system was practised in very many primitive societies. For the legislators of old whose names have been handed down to us by history or legend — Minos, Lycurgus, and Romulus — seem to have adopted the plan of an equal division of land, for each family, if not for each person. After a few generations this pristine equality was necessarily disturbed, and had to be restored by new divisions which were made at fixed intervals. This old custom continued to exist during the Middle Ages in many parts of Germany and of England, and it is still to be found, though in attenuated shape, both in Russia and in Asia.

An application of this system of equal division may be seen in the *mir*, that celebrated organization of the Russian communes. In the *mir*, land is periodically divided every three years or for longer terms, and during such periods each family is entitled to the independent enjoyment of its share.

No doubt such a system can be carried out, if need be, in primitive societies which comprise only a small number of men, and are acquainted with but one class of wealth, — to wit, land. But a man must have lost his senses to dream, even for a moment, of applying

it to societies like our great modern nations, in which riches are of such varied kinds and those among whom they are to be divided are so numerous.

Section 2. Each Man according to his Wants.

This formula was used by Louis Blanc in 1848, and is to be found in the fifth chapter of his *Organisation du Travail.* He says, "God forbid that we should regard equality of wages as a complete realization of the principle of justice! The true formula is: Let each man produce according to his aptitudes and to his strength, and *let him consume according to his wants.*"

If this formula means that the best system of distribution would be that which guaranteed to each man all that was necessary for his wants or his desires, so evident a proposition would be disputed by no one. But, for each man to be assured of a quantity of wealth which should be enough to satisfy his heart's desire, the amount of wealth in existence would have to be unbounded, or at any rate superabundant, and in that case all anxiety as to distribution would be needless, for the question would cease to exist. Unfortunately, we have not yet reached that happy state. Certainly a town can arrange for the distribution of water among its inhabitants, according to their respective requirements, if indeed water is plentiful enough for that; but it would find it of considerable difficulty to grant them an unlimited supply of bread, wine, meat, clothing, house-accommodation, furniture, carriages, and so forth.

We are therefore obliged to modify the formula, and to content ourselves with saying that wealth shall be distributed *in proportion* to each man's wants. But such a principle is open to most serious objections.

First of all, it presupposes a valuation of men's wants; but we are absolutely without any common measure which we could use for the making of such an estimate. To what extent do the wants of an artist exceed those of a manual laborer?

Further, it requires that we should form a judgment actuated by the utility and the morality of these wants; for it is obvious that

the basis of distribution cannot be constructed out of any chance wants or desires, but must be made only out of those that we regard as lawful. Otherwise we should be putting a premium on all sorts of covetousness. But what authority shall we set up thus to hall-mark men's wants, to accept the lawful and to reject the unlawful?

Even if we were to put out of reckoning all the practical impossibilities that we have just noted, we should still have to consider whether it is really conformable to justice to declare that the man, who has few wants and simple tastes, shall therefore be entitled to a smaller share than the man whose physical or intellectual wants are far more exacting. I fail to see why justice should require that the man who has twice my appetite should receive double my share of food. In any case we can easily imagine that a society based on such a principle would speedily present a very pretty picture.

When the formula is pressed a little further, it comes to this: the man who is married or burdened with a family ought to have a larger share than the bachelor. Put in these terms, it is absolutely undistinguishable from the formula of equal sharing or of communism. As a matter of fact, Louis Blanc himself foresaw these consequences, and the socialists, who now adopt the formula, are merely communists.

Section 3. Each Man according to his Capacities.

Saint-Simon, on his death in 1825, left behind him a politico-religious system which was more or less incoherent. But a powerful school, which bore his name, literally fascinated the most distinguished thinkers of that period. Two of his disciples, Bazard and Enfantin, added largely to his teaching, and made it far more precise, especially from an economic point of view.

The heading of this section forms a portion of the famous motto of his school: "Each man according to his capacities, each man's capacities according to their works." But who is to be charged with the task of determining each man's capacities and merits,

and of appraising the remuneration which is his due? The Government; it will be the Government's duty to appoint every individual in every class of work, just as nowadays it appoints public servants and awards them a rank and a salary which are in proportion to their presumable merits.

This is explained in the *Doctrine de Saint-Simon, séance 7:* "As each man is remunerated according to the service he performs, what is now called an income will henceforth be merely a salary or a pension." Further details are given in the twelfth article of his *Économie Politique*, which deals with the *Organisation Industrielle:* "The mayor, that is to say the captain of industry, must always busy himself with obtaining such information as will enable him to tell whether any one citizen, more than any other, is fit to cultivate a farm-land or take charge of a workshop. It is the mayor that allots a task to each man according to his capacities; let us add that it is he, too, who fixes the emoluments or the income accruing from the task."

Under these circumstances the Government will have to be an infallible pope, just as the priest is in the Saint-Simonian system; for how else could we dream of granting it so enormous a power? The Saint-Simonians get clear of the difficulty by saying that the distribution of wealth in this manner will be neither worse nor more unjust than it is now, for that at present it is distributed only according to the accident of birth. That is true; but public opinion is certainly far less shocked at seeing material fortune distributed by the accident of birth than it would be if it were awarded by the favor and arbitrary will of the Government. Nothing further would be gained if the choice of the Government were to be replaced by a system of competitions and competitive examinations, which could be applied to all classes of labor and all kinds of occupations, from the very lowest up to the very highest.

We hold that, while such a system is worthless in practice, it is equally so from the point of view of justice.

Intellectual or physical superiority ought not to be a claim to wealth. It is a sufficient privilege of itself, and need not be added

to by a new privilege; namely, the right of demanding a larger share of material wealth. Thus M. Renouvier, in the second volume of his book, *La Morale*, says: "If we are to take public opinion as our guide, the most intelligent and the most skilful should be regarded, as it were, as natural creditors of the average man. Such opinions are grave offences against moral law."

Section 4. **Each Man according to his Labor.**

This formula may be taken, and has often been taken, in two very different senses, which we should distinguish between with a care which is sometimes lacking.

It may mean, "for each man the product of his labor"; in other words, each man's share should be the things that he has produced. At first sight this formula seems thoroughly in accordance with our idea of justice, for what could be more just than to recognize each man's right to the portion of wealth which he has created and which would not be in existence but for him? It also seems very easy to apply, for what could be simpler than to let each man have for his share the articles he had produced? That does away with all calculations, all interference of any supervising authority; the law-giver has not to apportion the shares, — for each individual carves out his own when he creates it, — and has only to prevent encroachments on a neighbor's portion. Finally, of all formulæ, it seems to comply the best with that cardinal condition we should never lose sight of, the stimulation of production. For what exhortation could incite to individual activity more powerfully than the following: "Do what you can or what you will, and keep for yourself what you produce; that will be your portion. If your share is a large one, so much the better for you; if it is scanty, then so much the worse for you."

Yet in spite of its apparent simplicity, this formula leaves much to be desired, both in theory and in practice. Instead of being so easy to apply, it is absolutely incapable of application.

It might, indeed, be of service in a very primitive society where division of labor did not exist, under a system of small proprietor-

ship and small industry, in which each man, living by the labor of his own hands, only produced what was necessary for his consumption, and only consumed what he produced. Under such a system no social question need arise.

But in our great modern societies, division of labor, on the one hand, and large production, on the other, do not usually allow us to recognize and to determine what is the product of each man's labor. Should we not fail if we tried to make this calculation for some large business, say for a railway company, or even for an ordinary workshop? As soon as production ceases to be individual and becomes collective, our formula, "to each man the product of his own labor," loses all its meaning.

Stanley Jevons has compared the process of production in which the three factors of production are joined together, to the kitchen of the three witches in *Macbeth*, who throw into their cauldron and stir up therein the most heterogeneous substances for the purpose of brewing their "hell-broth." In such a blend as this how are we to set about finding what each man's share should be? What analysis shall we use, what law shall we follow, so as to arrive at this determination?

Further, even were the formula applicable, it would, if taken literally, lead to consequences as little to the taste of orthodox economists as of socialists. On the one hand, it would lead to the abolition of inheritance and of landed property; of inheritance because the heir cannot assert that the property he receives by inheritance or by gift is the product of his own labor; of landed property, because the land, the earth, is the product of no man's labor. On the other hand, it would lead to the narrowest individualism, to the complete negation of the solidarity which is the binding cement of all human society; thus it would do away with all relief to the needy; for as paupers produced nothing, their portion, too, would be nothing. In fact, the formula "for each man the product of his own labor" is only the scientific setting of the familiar adage "every man for himself." Does any one wish to get an idea of the working out of this formula on a large

scale? if so, let him go to some village in France occupied by small peasants, and he will see each man bending over his own bit of land which he pertinaciously digs, living only for his labor, and not caring the least in the world for what happens to his neighbors, or even to his relations.

Let us then desist from applying in its absolute sense the formula "to each man the product of his own labor," and let us modify it and say, "each man *according* to his labor." This formula deals not with the results of the labor, but with the labor itself; it takes into consideration, not the product obtained, but the effort made.

Measured by the standard of absolute justice, this doctrine appears to us to have firm foundations and to be superior to any of those previously examined. Indeed, it is equitable to apportion each man's remuneration according to the trouble he has taken, the sacrifice he has made, and the good will he has manifested, for, as Kant says, "of all things that can possibly be conceived, one thing alone can be called perfectly good, and that is a good will."

This is altogether independent of any extrinsic circumstances, such as the superiority or inferiority of his physical or intellectual powers, and the favorable or unfavorable opportunities which may have caused his work to be more or less efficacious. By the criterion of absolute justice, the labor of a crossing-sweeper seems to deserve an equal remuneration to that given to the labor of a James Watt or a De Lesseps, if indeed it has been conscientiously performed, that is to say, if the man has done all that he could possibly do. That is our conception of the nature of Divine Justice when we declare that it will mete out to men recompense and punishment according to what they have striven to do, rather than to what they have actually done, and that intentions and not results will have the more weight in its decisions.

But for the application of this formula we require some actual measure by means of which we may estimate and compare the exertions made by workers. Now it is absolutely impossible for

us to obtain such a scale, unless we profess to measure the results of labor by the product obtained, which would be to revert to the preceding formula. The dynamometer can give us information as to the amount of muscular strength possessed by a man, but it cannot teach us the amount of fatigue the exertion of it has cost him.

Yet the collectivist school boasts of having found this common measure in the amount of time bestowed on the work. According to this system each man's remuneration should be in proportion to the number of hours he has devoted to the labor of production. *An hour's labor* would therefore be the desired common measure. This was the method advocated by Karl Marx, who was formerly the leader of the *Internationale*, and who is still regarded as the teacher and the oracle of the collectivist school. He died in 1883, but, as we have already mentioned, he published in 1867 his deservedly famous book on *Capital*. He there says: "The quantity of labor is to be measured by its duration in time. The labor which forms the substance of the value of commodities is homogeneous human labor, *the expenditure of the same human laboring powers*."

But how foolish is this professed ability to estimate the exertion expended in any task by its duration! We cannot measure our pains any more than our pleasures by the dial of the clock. We all know that the farm-laborer who works "by the job" does in the same time thrice the amount of work, expends three times as much strength, and takes three times as much pains, as the man who works by the day. In the above example we have only considered labors of the same nature; for who would ever dream of measuring by the time occupied the work done by the man who clears a plot of ground and by the painter who covers his canvas? why not measure them by the yard?

Long before he knew Karl Marx's theory, Proudhon had said: "Putting aside all the differences inherent in various kinds of work, time is an arbitrary measure to employ, a real Procrustes' bed, on which struggles mutilated or distended labor, and on

which liberty and equality breathe their last." And long before him Molière had said more simply in the *Misanthrope:* —

"Voyons, Monsieur, le temps ne fait rien à l'affaire."

Moreover, is there not reason to fear that idleness will fare far too well under this new system? for if the right to a double share of remuneration can be obtained by taking twice the time over one's work, though the method will be highly advantageous for individuals, society as a whole will find it to be exceedingly dangerous.

Karl Marx answers this objection by stating that the time necessary for the production of any article must be fixed and rated according to statistical information. Thus, if we know the number of bushels of corn produced yearly in France, the number of laborers engaged in producing them, and finally the number of hours occupied by these men, it will not be difficult to find by simple division the time which is *socially* necessary, that is to say, the average number of hours that is required, for the production of a bushel of corn.

This ingenious arrangement is a partial answer to our criticism, but only so far as it departs from the principle which was suggested for application. If we reckon ten hours to be the length of the social labor which is necessary, on the average, for the production of a bushel of corn, it is clear that the skilful or fortunate man, who has been able to produce two bushels in the same period of time, will receive a double share, whilst the man who has been clumsy or unlucky enough to produce merely half a bushel, will get only half a share. This is no longer the principle of *each man according to his labor*, and according to the exertions he has made; no! it is the principle of each man according to the results of his labor, and that is quite a different thing.

If we really wish to abide by the ideal of justice which this formula proposed to realize and for which it was invented, we must deal with individual labor and not social labor: either justice is individual, or it is not; it has only to do with the striking of averages.

IV. Why there is no Solution.

Thus the end that we are pursuing eludes our grasp; we cannot find any system of distribution which completely satisfies our idea of justice, or those that we can find are not applicable.

It is useless, then, to persist in this vain pursuit. Let us confess that there is no formula of distributive justice, *i.e.* a formula which can solve the social question. Cairnes, in his *Leading Principles of Political Economy*, arrived at this conclusion, after having made a critical examination very similar to our own. Justice never resides within the limits of a formula, or, if by chance a suitable formula is thought to be found, it proves to be injustice: *summum jus summa injuria.*

Society is not formed by the logical development of an *a priori* principle; it is the resultant of a collection of very complex facts, some more or less conformable, others more or less opposed, to our idea of justice; *e.g.* occupation or conquest, customs or laws, labor or saving. We can only take society as it is, its good and its bad points together, and strive to eliminate the causes of justice which it conceals and to develop the germs of justice which it contains. The social question will be solved, first by guaranteeing each man the minimum without which he is in danger either of not becoming, or of not remaining, a "man," in the full sense of the word. The next step would be to give the working classes something more than that minimum; viz. a growing share in the benefits of that civilization of which they form a more and more important factor. Further, any wealth which remained over should be put into the hands of those who can make the best use of it. The inequality of the distribution of wealth would be of little harm if the rich were only stewards, who were entrusted with the care of making the best use of their wealth in the interests of all, and faithfully fulfilled that social function. History teaches us this very clearly; we shall see that landed property, which men have unavailingly tried to fit in with some principle of distributive jus-

tice, is very easily explained in its successive forms as a means of using land to a progressively better effect.

This modification of the distribution of wealth may be brought about in certain measure by the natural working of economic laws, such as the law of supply and demand; the exercise of individual initiative by means of association may also be of great service; but in our opinion neither of these forces will be powerful enough without State interference. We do not mean that the State should be the distributor-general of wealth and should give each man his share, for we have already rejected such a scheme; but the State can efficaciously influence the devolution of wealth by laws which relate to inheritance, decree taxes, regulate contracts such as loan for interest, land-rent, and the hire of labor, and in case of need impose compulsory expropriation in the public interests. Such influence has always been exerted by the State, — sometimes with great success, — but not in every case in conformity with justice or with social utility.

Thus the striking differences which exist between the distribution of private fortunes in France and in England mainly arise from the difference between the laws relating to inheritance which obtain in the two countries.

There is only one principle which regulates the distribution of wealth in present society; this is private property, which will form the subject of our next chapter.

CHAPTER III.

THE RIGHTS OF PROPERTY.

I. The Origin of the Rights of Property.

The rights of private property are the rights that a person may exercise over a thing to the exclusion of every other person.

The economists of the Bastiat school base this right upon labor; according to them a man should be the owner of the things created by his own activity, which are, in a way, only the legitimate extension of his personality. But in practice the use of this criterion would expose us to strange deceptions. Say to a man, "Let us make an inventory of your possessions; is this house the product of your labor?" The answer would be, "No, it came to me from my family." "Is that forest, are these fields, the product of your labor?" "No, they are the product of no man's labor." "Those goods that fill your shops, the crops that fill your barns, were they produced by your labor?" "No, they came from the labor of my workmen or of my tenant farmers."

Lawyers have been more prudent and more accurate. Labor does not figure in the definitions given of the rights of property either in the French Civil Code, (that child of the Revolution,) or in the texts of Roman Law. They accept property as a fact and define it by its attributes, without troubling to justify it. Nor do they even rank labor amongst the numerous modes of acquiring property which they specify.

In these varied systems of legislation *occupation* is regarded as the primary fact whence the right of property takes its rise. And that is the true opinion, for as Graham Sumner excellently observes in his book *The Respective Duties of the Classes in Society*, "Both historically and logically appropriation precedes produc-

tion. Early races regard possession as the best title to property. Priority of occupation is the only title which can be preferred to the right of the strongest." However, as occupation is only observable at the first beginnings of property, and as a return to origins is not often necessary in the substantiation of claims to property, in practice its place is taken by prescription. But prescription, just like occupation, is only a fact of possession, and is similarly devoid of any moral value. Let us then accept private property as an historical fact, and study it in its attributes and in its scope.

II. What are the Attributes of the Rights of Property?

The right of property is defined by the Roman jurisconsults as the *jus utendi, fruendi, et abutendi*, and by the French Civil Code as "the right of enjoying and of disposing of things in the most absolute manner." But, as all law students know, the portion of this definition which is the only characteristic attribute of the right of the property is the *jus abutendi;* were it restricted to the *jus utendi* or *fruendi*, it would be merely a right of usufruct or usage. This right of absolute disposal may be viewed under various aspects.

In our chapters on "Consumption" we have discussed those modes which merely suppose a personal employment of wealth, such as reproductive or unproductive consumption or hoarding. Now we have to deal only with those modes of disposal which influence the distribution of wealth inasmuch as they imply a transfer of property.

Section 1. A man may dispose of his article for a certain consideration by means of *sale*, *letting*, or *lending*, or by handing it over to hired workmen to turn to further account for him.[1]

This mode of employment is of grave import as regards the distribution of wealth, for by it "classes" are necessarily created

[1] The French phrase is the all-meaning "*faire-valoir*." — *Translator's Note.*

in society. Thus there are debtors, tenants, hired laborers who have all, more or less, to work on behalf of others; and as a counterpart to these there are owners of property, whether they live on their income or are employers of labor, who reap some of the fruits of other people's toil. We shall weigh these consequences when we treat of the various categories of sharers.

In any case the above are attributes which are inseparable from the right of property.

The right of property over a thing necessarily involves the right to sell or to exchange the article, for without that it would be useless. We know that, given the present social organization, which is based on division of labor, each one of us, generally speaking, only produces articles for the purpose of exchange. To do away with exchange, in this fashion, would simultaneously put a stop to all division of labor, and would cause society to revert to a state of savagery. Thus the owner's right of exchanging a thing has always been beyond the reach of controversy.

Once that we have admitted the right to sell, *i.e.* a man's right to yield up his thing for a price in money, the necessary consequence is the right to yield it up on any condition; for instance, for a specified term, and in consideration of a yearly sum payable during the period of time (this includes letting on hire, the system of granting leases, and loans for interest). It is further admissible to hand over one's article to workmen who have to supply a certain amount of labor on it.

Section 2. The article may be disposed of *gratuitously by gift or by bequest.* This manner of employment, too, seriously affects distribution; by allowing persons who have acquired wealth by their labor to transfer it to others, who have not worked to obtain it, this system may plant a do-nothing by the side of each worker, and create whole unproductive classes, who will accumulate wealth without having done aught to deserve it, *fruges consumere nati.*

That is true; but we cannot dream of depriving the owner of a thing of the right of giving it away during his lifetime or afterwards. If he is allowed to destroy it, why should he not give it

away? if he can consume it for his own gratification, perhaps in a senseless way, why should he not hand it over for others to consume? The history of early societies teaches us that the gift or the present was one of the most ancient modes of disposing of wealth, and probably preceded exchange or sale. Now one of the principal advantages conferred by the right of property is the ability to communicate its benefits to others.

Let our final and clenching argument be that which we urged in favor of the right to give; to wit, the fear of irretrievably injuring productive activity by preventing owners from disposing of their property for the benefit of their children. For the honor of human nature, it must be said that there are very many men in the world who work and who save far less for themselves than for others. If we compel them to think only of themselves, they will work less and spend more. Think of the wealth that would then be wasted in unproductive consumption in consequence of the freer living that would ensue! Think of the years that would be lost to productive labor through men retiring prematurely! By depriving men of the right of disposing of the fruits of their own labors, we should break one of the most powerful springs of production. Things that we could no longer dispose of and that would be non-transferable would thereby lose a portion of their utility; they would be less desired, and we should make less effort to produce them.

Certainly we might try to draw fine distinctions between donation and bequest, between the right to give during life and after death, by asserting that the rights of private property, and consequently the right of disposing of it, vanish with their original producer; but that would be a misapprehension of the rights of property. In the emphatic language of law, this right is real and not personal; if it is to be based on labor, we must recognize that it ought to last as long as the result of the labor, that is to say, as long as the article produced. But if we refuse to grant the right to bequeath, on the ground that it only comes into effect after the death of the owner, we should likewise have to abolish alienation,

the consequences of which clearly survive the disposer, and any form of disposal of a definitive character, such as those which law denies to usufructuaries.

Moreover, the distinction would be almost impossible to apply; for it may always be evaded by various combinations well known to lawyers, *e.g.* donation with reservation of usufruct.

We have no reason to wish that the wealthy should less often dispose of their goods gratuitously; nay, we should rather hope them to confirm this practice and to make it a rule to leave a space open in their wills for philanthropic or intellectual undertakings. In that way they would follow in the wake of wealthy Americans, who are already adding to the common estate of society by such methods.

SECTION 3. As the right of property over a thing naturally lasts as long as the thing, the duration of the right must vary in accordance with the length of existence of the particular article. Now one kind of wealth — and, solitary as it is, it comprises more than half the total of all the wealth in the world — lasts forever; we refer to land. Another class of wealth, of no less importance, also possesses a perpetuity that might be called artificial, for it springs less from the nature of the articles than from certain agreements entered upon by men. This includes the capital represented by share-warrants, certificates of government stock, and so forth. Therefore, as the right exists as long as the object over which it holds, the right of property over these various classes of goods must share the *perpetuity* of these goods.

By this highly important attribute of the right of property, the distribution of wealth is powerfully affected. As, in this instance, the right must survive the person of the original holder, it has to pass to some other person, *i.e.* to a successor; hence *inheritance* is seen to be a necessary consequence of the perpetuity which is characteristic of the right of property.

Most socialists regard as one of the gravest vices of the social order, and as one of the most iniquitous of the injustices that obtain in the distribution of wealth, the principle of inheritance

which grants the children of the rich, even to the hundredth generation, the privilege of being rich in their turn without having done aught to deserve it.

We have already seen that Saint-Simon's school included the abolition of inheritance in its programme; but, contrary to the usual opinion, Fourier and his school fully admitted the principle. The contemporary collectivist school partly allows inheritance as a consequence of the right of private property. This concession ceases to be astounding if we only remember that collectivism excludes from the purview of private property both land and capital, *i.e.* the only wealth which is perpetual, and the inheritance of which might have serious consequences. Inheritance is of trifling importance when restricted to objects of consumption, as under the collectivist system.

We shall see later on that this injurious effect of inheritance, the possible creation of an idle class, is counterbalanced by certain social advantages. Further, it would be childish to seek to prevent the inheritance of wealth, for we cannot dream of hindering the application of the principle of transmission by inheritance to many other privileges which are even more important than material fortune. We refer to health, talent, virtues, social esteem, and a mere surname which of itself alone is often worth a fortune. The law of heredity is assuredly the natural law *par excellence*.

The following might be the most sensible mode of settling the complicated question of inheritance and of determining who ought to receive the goods which survive their original owners.

Firstly. Whenever an owner has assigned his property by will, his desires should be respected, whatever they may be. We know that freedom to give and to bequeath is a natural attribute of the right of property. Further, if we confine ourselves to our criterion of a fair distribution of wealth, *e.g.* the placing of wealth in the hands of those who can use it best, it seems that no one is better fitted than the owner to point out the suitable persons.

Secondly. Whenever the owner has not conveyed his property to any one, the property should fall to the government as unclaimed

estates;[1] for society, as represented by the government, seems to be the natural heir of all persons who have not formally disposed of their goods. In fact, each of us who succeeds in the world and becomes an owner, owes part of his respective share of prosperity to the collaboration of all and to that common fund of ideas, inventions, means of action, and modes of transport from which we benefit. It is just, therefore, that at our death and in default of any other person to whom we have assigned our rights, our property should return to swell the social patrimony from which it has partly proceeded.

To use legal phraseology, freedom of disposal by will, on the one hand, and the abolition of succession *ab intestato*, on the other, should be the leading principles to guide the legislator in matters of inheritance, as general principles only, for, if strictly applied, they would be very unjust.

With reference to freedom of disposal, it must not be forgotten that every owner of property has certain obligations as regards his children, his parents, and his wife; *i.e.* as regards those to whom he has given life, from whom he has received life, and with whom he shares life. Every system of law compels him, at least, to support them during life, and after death the obligation is heightened instead of being nullified. It is right, therefore, that freedom of disposal by will should exist only after a certain portion has been put aside for the above classes of persons; but the "reservation" which the French Civil Code grants is an altogether excessive share. As Montesquieu says, "though the law of nature orders fathers to provide their children with food, it does not compel them to make them their heirs."

It would be barbarous to apply hard and fast rules for the abolition of succession *ab intestato*, if there is reason to believe that the silence of the deceased has been due to mere negligence

[1] This was advocated by Jeremy Bentham in his *Supply without Burden or Escheat* vice *Taxation*, 1795 (Vol. II of his Works). The late M. Godlin of Guise included this and much more under the claim for "l'hérédité de l'état," with which he identified himself. — J. B.

or lack of foresight. Succession *ab intestato* for children, parents, and even for brothers and sisters, should in all cases be admitted as a reasonable interpretation of the testator's intentions; for if he had meant to disinherit them, he would have said so. But, when we come to a cousin in the twelfth degree, or even to a nephew, it would be absurd to apply the same reasoning and interpret the silence of the deceased as giving a right to the claimants.

It is almost needless to remark that the right of succession *ab intestato* can in no way stimulate productive activity, and that it is far more likely to encourage idleness by the "expectations" which it engenders. A heritage which comes from an uncle in America is a mode of acquisition which does not differ in the least from a drawing in a lottery, and exercises the same demoralizing influence both on the recipient and on those who envy him his good luck.

The various schools think very differently as to our suggested methods. The socialists highly approve of abolition of succession *ab intestato*, but will scarcely listen to the mention of freedom of disposal by will. It is odious to them inasmuch as it is one of the sovereign attributes of the right of property; and further, it is regarded with suspicion because there is a fear that the testator, in the disposal of his property, might be inspired less by considerations of social utility than by his own personal preferences, and might thus revive all the injustice of the old order of things.

The Catholic school approves of freedom of disposal, for that points to a re-establishment of paternal authority and (though the avowal is not openly expressed) may lead to a return to primogeniture and the reconstruction of a landed aristocracy. But this school is entirely opposed to the abolition of succession *ab intestato*, for it wishes to keep estates in the family — a desire shared by all legislators of conservative tendencies.

The Liberal economic school is enamoured of neither of these principles. Freedom of disposal by will, so it thinks, may lead to a return to the old order and to that past which it helped to destroy. In England and in France fathers do not avail themselves even of

the narrow liberty they might find within the limits of the shares allowable by law.

Still less does the Liberal school sanction the abolition of succession *ab intestato;* for it is horrified by the prospect of the State becoming the universal heir, and holds that, as regards social utility and the judicious employment of wealth, property had better fall into the first comer's hands rather than into the abyss of State budgets.

The drawers of the Civil Code have obeyed opposing tendencies in turn. The levelling notions of the Revolution caused them to adopt the rule of equal division; but, in accordance with the co-proprietorship of the family as a whole which obtained under the Old Régime, they extended inheritance *ab intestato* as far as cousins of the twelfth degree, and excluded wives.

However, for some time greater definiteness has been observable in the double aim we have expounded. A number of economists and of lawyers are making two simultaneous demands: *firstly*, a certain extension of freedom of disposal by raising the portion that can be bequeathed by will at least to a half of the whole estate; *secondly*, a certain limitation of the right of succession *ab intestato* which would be confined to the fourth degree, or at the outside to the sixth degree.

III. Over What Things should the Right of Property extend?

In modern society private property extends over everything that can be seized or occupied by man. Almost the only objects that have still escaped its sway are those which from their very nature are not susceptible of such appropriation; viz. the air, the sea, and great rivers. But facts are not necessarily in agreement with equity, and the mere fact of an object being appropriated does not prove that it can be rightfully appropriated. On this subject it seems wise to draw certain distinctions; two have been proposed. Let us examine them in turn.

Section 1. The Distinction between Capital and Objects of Consumption.

The collectivist school concedes the right of private property over every article that is destined for consumption, but refuses it over all objects to be used in production; that is to say (in the words of the programmes issued by that school), "the soil, the subsoil, buildings, machinery, and capital of every kind."

This distinction has already been mentioned and criticised by us. It is hopeless to attempt to find any rational basis on which it might be built. Starting from the principle that private property must be grounded on labor, it cannot be denied that capital, whatever form it may take, consists only of the products of labor, which differ from other wealth in nothing but the employment to which they are put.

That capital is *originally* the product of labor is not denied (for it cannot be denied) by Karl Marx himself in his *Capital*. He does not contest the legitimacy of the worker's ownership of the instrument of his labor. But the theory of his famous book is that capital, as it exists nowadays, is no longer related to the original accumulation which was the fruit of labor and of saving; that the modern accumulation of capital has been built up by the expropriation of the original producers, and by the plundering of the workers effected by means of trade, of usury, and especially of the wages-system; and that "capital has entered the world sweating blood and mud from every pore." In other words, the theory advocated by Karl Marx and the collectivists comes to this: certainly capital is the product of man's labor, but it is the product of the labor of the workers, and not of the labor of the capitalists. Therefore it must have been stolen by the latter from the former.

We shall have to examine the legitimacy of this thesis when we deal with the conflict between capital and labor with regard to profits. At present we need not discuss it. Even if we were to grant that all capitalists are robbers, the argument would not touch

us; for in this place we have not to determine whether capitalists are the rightful owners of the capital they possess; our business is to discover whether capital can be the object of any lawful right of property whatsoever. That is quite another matter.

Thus the argument that the collectivists adduce in favor of their distinction is rather a question of fact than a question of principle. They assert that, as it is impossible to dispense with capital in production,[1] possessors of capital will necessarily be placed in a predominant position, which will enable them to impose their own terms on those of their fellow-men who are without capital; therefore they can compel them to work for their profit, whether as slaves, as serfs, or as wage-receivers. To this our answer must be that the possession of wealth of any kind — whether it be as capital or as articles of consumption, it matters not — will always give a privileged position to the man who has been skilful enough to obtain that wealth, and will enable him in a certain measure to dictate his own conditions to the rest of mankind. The only means of obviating such a result would be to prohibit all large fortunes and to enforce a universal mediocrity of fortune; in other words, to return to communism. In whatever direction collectivism seeks to ride, it always ends by being thrown into this ditch.

It must further be observed that as soon as ever private property in capital is abolished, there will no longer be any motive for individual saving. But at the present day it is precisely this individual saving that, from its countless springs, incessantly feeds and renews the flood of capital within a country. If once these springs cease to flow, how can we insure the maintenance, the renewal, and the gradual increase of the capital of a country?

Oh! it is rejoined, the State will yearly deduct a reserve sum from the income of society, which would then be blended with its own. He would indeed be reckless who would allow the economic future of a country to depend upon the savings made by a government!

[1] As it has been happily put by a German writer, their cry is not "away with that capital!" but "here with that capital!" — J. B.

Still, in certain measure, we may be able to make some concession to the demands of the collectivists. The instruments of labor which are now used in large industry, under the name of capital and in the shape of factories, machinery, and mines, are too huge to be worked by a single person, as was the tool of the artisan of former days; nay! they demand the co-operation of several hundreds, and sometimes of several thousands, of men. Now, since production has to a certain extent become collective, it would be rational for ownership to be collective in the same degree. It would be advisable that the factory, the machines, the mine, instead of being the property of a single individual, the employer or the company, should become the collective property of all the individuals who co-operate in the undertaking.

This is the aim that co-operative societies have in view, and, though difficult to realize, it is a perfectly legitimate end. But if ever this co-operative system is actually established, it will certainly not involve the abolition of all property in capital; it will only transfer this property from the hands of capitalists into the hands of workmen.

Section 2. The Distinction between Land and Products.

Another distinction has been proposed which seems to be far more reasonable: on one side it places all products — all movable goods, if that legal term be preferred — which, by the mere fact of being products, are necessarily the result of some labor, whether it be great or small. The phrase "movable goods" unfortunately excludes houses and other buildings, which are obviously the products of labor and should therefore be included in this first class.

On the other side is set the actual substratum of production, *i.e.* land and mines, which, from the single circumstance that it exists prior to any act of production, can only be the work of nature and cannot proceed from the labor of man. If we wish to adhere faithfully to our principle that bases private property upon labor, we must admit the lawfulness of the right of property over this first class of wealth, because such objects are artificial, but must

declare it to be unlawful as regards the second category, because the components of that class are natural.

The simplicity and the logic of this distinction strongly impress the mind. It is of very ancient date, for we shall presently see that it can be traced back to the first beginnings of property; it is highly capable of application to the present, for in our time it has met with the approval, not only of socialists, but also of a number of contemporary economists and philosophers.

It was the basis of the socialistic system of Colins, who is now dead, but whose school still exists in Belgium. Henry George in America and A. R. Wallace in England have also used it as the groundwork of their systems. Moreover, it has been adopted, though with some reservation, by Messrs. Herbert Spencer, De Laveleye, Walras, and Secrétan. None of these is a socialist in the popular sense of the term, and some of them are the leaders of the individualist or liberal school.

But the optimistic school keenly attacks this distinction, which is capable of powerfully shaking the institution of landed property. This school asserts that land is a product of the labor of the agriculturist in the same way as the clay vessel, which is fashioned by the hand of the potter, is a product of his labor. No doubt man has not created land, but neither has he created potter's clay. Labor never creates; its task is restricted to modifying the materials supplied to it by nature. Now this modifying action of labor is surely no smaller when it is exercised on land itself, than it is when exerted on the materials drawn from the earth's bosom. The optimistic school refers us to those patches of land which the peasants of the Valais or of the Pyrenees have literally constructed on the slopes of their mountains, by carrying all the earth for that purpose in baskets upon their backs. An ancient author tells us how a peasant was accused of sorcery because of the abundant crops that he obtained from his plot of land, whilst the neighboring tracts were nothing but barren heaths. When he was cited to appear before the Roman prætor, his only defence was to show his two arms, and cry, "*Veneficia mea haec sunt!*" "These are

my only spells!" To justify itself against the attacks of which it is the object, landed property has only to repeat the same proud answer. Thus the optimistic school.

Though this line of argument certainly contains some truth, still that does not appear to be enough to overthrow the distinction between land itself and the wealth that it yields. No doubt mankind and land have ever been bound together by the tie of daily labor, often labor of the severest kind, to express which the term was invented of laboring with the sweat of one's brow (*labor*, toil). But though land is the *instrument*, it is *not* the *product*, of labor. It exists before any labor exerted by man, and through it alone can that labor become productive. Besides, it is not lifeless matter like clay in the hands of the potter: it lives, it produces, nay, it labors; from it man receives the great treasure of natural forces — the sun, the rain, the dew, and, in particular, the situation, which we have already seen to be the condition indispensable for all production. Why, then, should not land possess a value and a utility which are independent of all human labor?

We grant that by his labor man daily improves and modifies this wonderful instrument of production with which nature has supplied him, for the purpose of better adapting it to his own ends, and thus he clearly confers on it a new utility and a new value. But the primitive value of the ground can still be easily observed beneath the accumulated strata of human labor.

This is discerned by the naked eye in the forest which has not yet been cleared, and the prairie which is still uncultivated. Yet these can be sold or let at a high price and at a high rental. It is visible in the tracts of sandy shore in the neighborhood of Aigues-Mortes at the mouth of the Rhone, which had only been ploughed by the sea-breeze; yet the fortunes of their lucky possessors were made when it was discovered by chance that on such spots vines could be planted which escaped the phylloxera. Again, it can be perceived in building-sites in large towns which have never felt the plough, but the value of which is far higher than that of any cultivated land.

When the school of Bastiat attempts to show that the value of land proceeds solely from labor, it lays stress on the circumstance that where land is virgin soil, as in portions of America, it is valueless. The statement is correct, but the argument derived from it does not prove anything. The worthlessness of lands on the banks of the Amazon does not arise from their being virgin soil, but from their being situated in a desert; and, where no men exist to utilize things, the very notion of wealth vanishes.

It is obvious that land was valueless until the first man appeared upon its surface, and to that condition it will return when the last of our race has disappeared. Virginity of the soil has nothing to do with the matter. Here is a proof of it: if these tracts on the Amazon could by the stroke of some magic wand be transported to the banks of the Seine, their present condition being unchanged and their virginity left intact, they would probably be of as high a value as the oldest estates in France, in spite of the marks that the latter bear of the labor of a hundred generations.

If this hypothesis seems to be too extravagant, let us take any chance plot of land in France and suppose it to be abandoned for a hundred years, till all traces of man's labor have been effaced and nature has given it a new virginity. Shall we be told that then that land will have lost all value, that neither a farmer nor a purchaser will be forthcoming for it? Surely not; on the contrary, we may safely wager that, though it has been left in such a state, that land, a hundred years hence, will be far more valuable than it is to-day.

This natural value of the ground, again, is plainly visible in the case of cultivated areas, and is shown by the unequal fertility of land. Thus two plots may have been the object of equal labor and of equal expenditure, but one of them may be worth a fortune while the other may not be worth a farthing. It also appears, as will be seen later on, in the unearned increment which land receives independently of human labor and from which the owner derives an income which constantly increases.

We therefore hold that the distinction is justified in principle.

But do we mean by that, that landed property is to be condemned without our hearing any further evidence? Before we pronounce so hasty a judgment, let us see how landed property took its rise.

IV. The Historical Evolution of Landed Property.

In modern societies, at least in the old European countries, private property extends over almost the entire surface of the land. Not only has this appropriation been sanctioned by all systems of legislation, but, moreover, current opinion has come to regard it as *the* type of property. When we speak of "property" without using any qualifying term, we are always understood to mean landed property.

But the numerous researches which have been made, especially of late years, justify us in holding that it has now been proved that landed property is an institution of relatively recent date. We learn that it was unknown in the earliest phases of civilization, and that its formation was a matter of great difficulty. For long years men were cognizant of no other private property than that which related to movable goods and to houses, for those were the only articles which could be regarded as the product of individual labor.

As Herbert Spencer says (*Principles of Sociology*, Vol. II, page 635, 1882 edition): "Records of the civilized show that with them in the far past, as at present with the uncivilized, private possession, beginning with movables, extends itself to immovables only under certain conditions. We have evidence of this in the fact mentioned by Meyer, that 'the Hebrew language has no expression for *landed property*'; and again in the fact alleged by Mommsen of the Romans, that 'the idea of property was primarily associated, not with immovable estate, but with "estate in slaves and cattle" (*familia pecuniaque*).'" Compare the etymology of the word "mancipatio," which evidently refers to movable goods.

Six successive stages can be observed in the evolution of landed property, and these we propose to briefly indicate; but we must

not be understood to mean that at all times and in all places property has assumed each of these shapes in succession.

Firstly. It is obvious that landed property cannot arise in a society which lives by the produce of the chase, or among pastoral races who lead a nomadic existence. Agriculture is a prior condition. Even in the earliest phases of agricultural life landed property is not yet instituted. In those days land is over-plentiful, and no one experiences the need of marking off his share; moreover, agricultural methods are then in the embryonic stage, and the cultivator leaves his field as soon as it is exhausted and takes another one. The land is cultivated in common, or at least promiscuously; it belongs to the society as a whole, or rather to the *tribe*. The fruits of the land are all that the producer obtains.

Secondly. Gradually the population becomes more sedentary and settles more firmly on the land. It also grows denser and feels the necessity of resorting to a more productive method of cultivation. Thus the first stage is supplanted by a second phase; namely, temporary possession together with *periodical divisions*.

Arva per annos mutant, "they change their land yearly," is the famous phrase used by Tacitus when speaking of the ancient Germans.[1] But of late years the meaning of the sentence has been contested, and a new and somewhat paradoxical translation has been proposed; viz. "they change their rotation of crops yearly." This system of the tribe holding the land as its collective property is still to be met with in the *arch* of the indigenous tribes of Algeria.

Though the land is still regarded as belonging to the society, it is equally divided among the heads of families, not as yet definitively, but only for a certain time. First of all for a year, for in that is comprised the ordinary cycle of agricultural operations. Then, as methods of husbandry improve and cultivators require a longer space of time for the accomplishment and fruition of their

[1] Tacitus, *Germania*, ch. 26. The interpretation of the passage is fully discussed in Dr. W. Cunningham's *Growth of English Industry and Commerce*, 2d ed., 1890. — J. B.

labors, the division is gradually allowed to hold good for more and more lengthy periods. This plan of periodical division is still extant in Russia, and is well known as the *mir*. This *mir*, the community composed of the dwellers in each village, is the possessor of the land, and distributes it amongst its members by divisions which are usually biennial, but the periodicity varies from one parish to another. The territory of the parish is of three kinds: the land which has been built over together with the gardens which constitute the hereditary property of the parish; this is not subjected to division. The two other classes, the arable land and the meadow-land, are periodically divided into portions which are as equal as the number of inhabitants will allow. The assembly formed by the heads of families, the *mir*, has sovereign power over the distribution of the respective shares and the fit cropping. Further details can be found in M. Anatole Leroy-Beaulieu's *La Russie* and M. de Laveleye's *La Propriété*. It has been maintained that these Russian village communities are tending to abandon this system in favor of the institution of private property. But the assertion has been by no means proved.

Thirdly. At last a time comes when these periodical divisions fall into disuse, for skilful cultivators do not readily agree to an arrangement which periodically deprives them of the fruits of their labor in the interests of the whole community. Thus we arrive at proprietorship of the family as a whole, each family becoming henceforward the proprietor of its own portion. But private property is not yet established, for the right of disposal is still non-existent. The head of the family can neither sell the land, nor give it away, nor dispose of it after his death, for it is held to be a collective estate, and not a private property. This system can even now be observed in the family communities of Eastern Europe, especially among the *Zadrugas* of Bulgaria and Croatia, which consist of between fifty and sixty persons. But they are now somewhat rapidly disappearing in consequence of the spirit of independence manifested by the younger members of the family. (See M. de Laveleye's article in the *Revue d'Éco-*

nomie politique for August, 1888, entitled "Les communautés de famille et de village.")

Fourthly. The history of the evolution of landed property would be gravely incomplete, were we not to take into account a circumstance which, though it seems of the nature of an accident, has unfortunately occurred in the evolution of all human societies I refer to conquest. There is probably not a single territory that has not, at some time or other, been taken away by force from the people that occupied it and been appropriated by the conquering race. As a proof of the influence conquest has had upon the evolution of landed property, Herbert Spencer makes the following interesting remark. The regions in which the ancient forms of collective property have been the best preserved, are precisely those poor and mountainous localities whose very situation has insured them against conquest.

The conquerors, for their part, in virtue of their position as victors and masters, have not troubled to cultivate the land, have merely assumed the legal ownership, the "superior lordship," as it used to be called, and have left the subjected people in possession of the soil by what is called *tenure*. This tenure was more or less akin to actual ownership, but was always limited by the conditions of the concession made to the cultivator, by the servitudes which weighed heavily upon him, by the dues he was bound to pay to his overlord, and by the impossibility of alienating the land without the authority of his superior. For several centuries this "feudal system" was the foundation of the social and political constitution of Europe, and is still to be met with in several countries, notably in England. In that country much property, theoretically at least, is held in the form of a tenure as copyhold and is still shackled by a number of restrictions (entails, settlements, etc.), which it experiences great difficulty in shaking off. As Blackstone says, thus was established in English law the cardinal maxim with regard to possession of land: the king is the only master and the original owner of all the land in the kingdom.

Fifthly. The development of individualism and of civil equality

and the abolition of the feudal system, particularly in those countries which have felt the influence of the French Revolution, have led to a fifth stage, which has been realized in our times; namely, the definitive institution of *freehold landed property*, together with all the attributes involved in the rights of property.

But this landed property, for example, as it is set forth in the Code Napoléon, is not yet altogether identical with personal property. It possesses numerous differentiating characteristics which are well known to lawyers, and are especially marked by the various degrees of difficulty to which the rights of alienation and acquisition are subjected. Sufficient instances are the inalienability of the immovable estate of women married under the dowry system, the formalities required for the transfer of real estate, and the enormous succession duties which are levied for change of owners.

Sixthly. Thus only one step further was required for the complete assimilation of landed property and personal property, and for the reaching of the last term in this evolution. This was the *mobilization* of landed property, by which each individual might be enabled not only to possess land, but also to dispose of it as easily as any article of personal property. This final step was taken in a new country, Australia, by the institution of the celebrated Torrens System. By this the owner of real estate is able, as it were, to docket his land in the shape of a sheet of paper, and to transfer it from one person to another with the same ease as if it were a bank note, or at least a bill of exchange.

In the author's *Étude sur l'Act Torrens* (1886), full details are given as to the Torrens Act, which is named after the statesman who caused its adoption in New South Wales about forty years ago. It has two essential features. The first is a *register* similar to the French civil register; in this each real possession has its own page, which is devoted to its plan and its specification; on the page, too, is related (as far as possible) the history of the realty from the date of its entrance into the domain of private property. The second is a *title-deed*, which is a fac-simile, sometimes even a photographic reproduction, of the leaf in the

register. When this has been handed over to the owner, it absolutely stands for the realty itself, and can in its turn be yielded to others, given as security, and so forth.

As Torrens himself said, the object of this system was to rid landed property of all the barriers that prevented free access to it, "like the portcullis, drawbridge, and moats which used to defend the approach to the castles of our ancestors." The system was adopted in turn in all the Australian colonies and in some other English colonies, has lately been tried in Tunis, and is to be attempted in Brazil. Various legislative endeavors to introduce it into England have hitherto proved unsuccessful.[1]

Our review of the history of landed property might seem to justify us in drawing this final conclusion; the reign of collective property has passed away forever, for we see the institution of property growing more and more distant from that early stage and constantly moving in a diametrically opposite direction. However, the future may belie that conclusion. It is not impossible that the evolution of landed property may have in store for us the same surprise as we have experienced from the study of the evolution of other institutions, *e.g.* a money and a mercantile class; there may be some right-about-face movement which may bring our institution back to a spot not very distant from its starting-point. We may note that precisely the same predictions as ours have been set forth by Herbert Spencer, who has traced the history of landed property in a masterly manner, and who is one of the leaders, or rather Irreconcilables, of the individualist school; for on pages 643, 644, of the second volume of his *Principles of Sociology*, we read: "So it seems possible that the primitive ownership of land by the community, which, with the development of coercive institutions, lapsed in large measure or wholly into private ownership, will be revived as industrialism further develops."

[1] Further references to the Torrens Act may be found in the *Bulletin de la Société de Législation Comparée*, and in the *Revue d'Économie politique*, June, 1890, "Le Système Torrens en Angleterre," by Charles Fortescue Brickdale. — *Author's Note.*

V. The Legitimacy of Landed Property.

We have now traced the course of landed property; we have seen it gradually unfolding itself from the primitive community and taking the shape of free private property in ever-increasing likeness to personal property; and we have observed how its successive transformations have followed in the wake of the progress of agriculture and the development of civilization. It will now be easy to determine the economic causes which have, so to speak, necessitated this establishment of landed property.

One active force is the increase of population, which has compelled mankind to practise more intensive cultivation in order to obtain from the earth a larger and larger supply of articles of subsistence.[1] In Canada it has been observed that the native races who live by the chase require the enormous area of fifteen square miles per head so that each man may continue to exist. Below this limit they are decimated by famine. But agriculture, as it is practised in Western Europe, can support from four to five thousand times more.

Secondly, to stimulate labor it is necessary to guarantee the cultivator a right not only over the produce of his land, but also over the land itself, as the instrument of his labor. This right is temporary at first, but it is continued longer and longer as the progress of agriculture requires labor of longer duration, and finally it becomes perpetual.

The right to the fruits of the earth carries with it the right to the earth itself, at least for a certain period. The man who has sown the seed must be given time to reap the harvest. The planter of vines must wait six or seven years for his first vintage; half a century must elapse before the sower of the acorn can cut the oak. Moreover, even yearly cropping, if at all advanced in method, requires certain labors (such as manuring, improvements of the soil, drainage, and irrigation), which can only be recouped by the

[1] This aspect of the increase of population was first fully treated by Malthus. — J. B.

successive crops of ten, twenty, or even fifty years. The man who has performed such labors must be allowed the possibility of repaying himself; otherwise it is certain that he will relinquish them.

Still we may ask if it was really necessary to grant perpetuity to landed property. It was not indispensable for the successful cultivation of the soil; for surely man, the creature of a day, does not require all eternity for the execution of the largest labors. This is shown by the fact that such enormous undertakings as the cutting of the railways and the canals at Suez and at Panama rest only on concessions for ninety-nine years.

It is true that the logic of the right of property should lead to this consequence, for the rights of property last as long as the object possessed, and in this case the object is of perpetual duration. Of all wealth land alone holds this privilege; time, the destroyer of all things, *tempus edax rerum*, lays his hand on the earth only to give her a new youth with each returning spring. As we shall see shortly, the extension of this perpetuity from the object to the right itself involves some troublesome consequences.

Besides the economical it is obvious that other causes, some political, some moral, some even religious in origin, have presided over the genesis of landed property, and may even now, in a certain degree, be called to testify in its favor; but in this place we have only to deal with economical causes. Have those two causes, which led to the creation in the past of private property in land, now lost their power of defending it against the attacks of its adversaries? We think not.

For, given on the one hand the more or less rapid but continuous increase in population, and on the other hand the insufficiency of the production of wealth, which we have so often observed, it is as necessary now as it was in early days to choose the mode of cultivating the land which shall allow of the nourishment of the largest possible number of men upon any given area. In our opinion private property best satisfies that need.

It is useless for the collectivists to tell us that the collective proprietorship of land would now give far better results than those

obtained by private property, in consequence of that system alone enabling us to employ the methods of large production and to reap all their advantages. We have already seen that we must not expect from large production in agriculture the same advantages as it gives in manufacturing industry. It effects a reduction in general expenses, but it also produces a smaller quantity of articles required for our subsistence: now what we especially desire to obtain from the earth is the greatest possible amount of gross produce.

A further question is the organization of this cultivation of the land under the system of collective ownership. On this point the collectivists are far from being of one mind. If this task is to fall to the lot of the State or of the various communes or parishes, we must confess that the results heretofore obtained in the few cases of which we are able to judge have scarcely been encouraging. We refer to State forestry and State railways, and to the administration of public land. The value of the state forests in France is estimated to be £50,500,000, but the net returns are scarcely £480,000, or rather less than one per cent. Though the cost of the French State railways was £32,000,000, the net returns have been rather less than £160,000, or slightly under one-half per cent. But to be candid, we must admit that in some countries, in Germany in particular, State property has yielded a much higher income.

If we were to abide, then, by strict logic, land ought to belong to society; but, as society as a whole cannot turn it to the best use, it concedes it to individual persons, and commissions them to cultivate it for the further benefit of all. Thus we regard landed property as based less upon natural rights than on civil law, — not on a principle of abstract justice, but on public utility. This distinction between landed property and personal property is excellently shown in the new Servian Code in the following clauses: "The right of property over products and movables acquired by human exertion is based on Nature herself and is established by natural laws"; "The right of property over realty

and soil, whether cultivated or uncultivated, is confirmed by the constitution of the country and by civil laws."

Still we may ask whether landed proprietorship has not grown to an excessive and mischievous extent in thus absorbing almost the whole of the land of a country, and whether it would not have been more rational to limit it according to the spread of the cultivation of the earth, since that is the only title which we grant it?

Our views as to the limitation of landed property to land under cultivation happen to coincide with the Mussulman law. In this respect that system is more rational than the legislation which is derived from the Roman Law. It restricts private property to such land as has been the object of effective labor, and this it terms *living* land in contradistinction to uncultivated land or *dead* land which should continue to be collective property. "When any man has put life into dead land, says the prophet, it shall belong to none other, and he shall have exclusive right over it." The following are the labors which are thus to transfer land to private ownership: "To cause water to flow as a spring either for drinking or for watering the fields; to divert water from submerged tracts; to build upon uncultivated ground; to make a plantation thereon; to break it up by tillage; to clear away the undergrowth which renders it unfit for cultivation; to level the ground and remove stones therefrom." By the application of these principles in Algeria and Java, collective property in those countries is even now of great importance. In France there are 50,000,000 acres of land of this description (two-fifths of the whole area of France), but only 15,000,000 acres of this land still belong to the State or the various parishes. All the rest has been swallowed up by private proprietors.

There are grave disadvantages, which have been more than once pointed out, in the absorption by private proprietors of such collective property as public lands, woods, and pasture land. No doubt, as this early shape of collective property tends to disappear, our present societies witness the growth and development of an

even larger form of collective property; viz. railways belonging to the State, and gas, water, and tramway enterprises which are carried on by municipalities. But the new does not compensate for the loss of the old form.

VI. The Law of Ground Rent.

Landed property seems to consist wholly of advantages, and to be altogether free from disadvantages, when we observe it at its commencement and in its early stages, as may now be witnessed on the pampas of the Argentine Republic or in Australia. Hence it is that its institution is so easy. Since it only refers to lands that have already been cleared, and extends *pari passu* with the spread of cultivation, it appears to be sanctified by labor. At this stage it occupies but a small portion of the soil, and land is still over-plentiful; hence no monopoly is associated with its existence, and the law of competition holds good as with all other undertakings.

But, when the society develops, and population becomes denser, a change comes over the character of landed property. It gradually assumes the appearance of a monopoly which continues to increase without limit, giving great gains to the owners of land, but doing great injury to society as a whole.

This evolution was first expounded by Ricardo,[1] in that profound theory which gave him fame, and has for half a century furnished a staple for the discussions of all economists.

Originally, says Ricardo, as men were only obliged to put a small quantity of land under cultivation, they chose the best plots. Still, in spite of the fertility of this land, the holders do not receive from their cultivation a higher return than they could obtain from any other employment of their labor and capital. For, as there is still other land, the law of competition comes into effect, and brings down to the cost price the value of the produce even of this most fertile land.

[1] Anderson and Malthus preceded him in teaching the received theory of Rent. Ricardo himself acknowledges his debt to the latter. — J. B.

But a time comes when increase of population necessitates an increase of production, and as land of the first class has been appropriated in its entirety, less fertile land has to be put under cultivation; *i.e.* land on which the cost of production is higher. Let us suppose that land of the first class yields 35 bushels of wheat per acre, at an outlay of £12, or a little more than 6 shillings a bushel; then land of the second class will only produce 25 bushels for the same expenditure, and the cost of production per bushel will be more than 9 shillings. Now it is clear that the owners of this land will not be able to sell their corn below this price, for in that case they would lose, and would refuse to produce any more. But on our very supposition people cannot do without this land. It is no less evident that owners of land which was occupied first of all will not be so obliging as to sell their corn at a lower price than their neighbors. They too, then, will charge 9 shillings a bushel; but as their corn cost them only a little over 6 shillings, as heretofore, they will therefore realize a profit of nearly 3 shillings a bushel, or £5 5*s.* an acre. It is this profit which is called *rent*, both in Ricardo's theory, and in the vocabulary of political economists in which it has gained a place. By this is meant a return which is peculiar to landed property, and is due to natural or social causes which are independent of the labor or the expenditure of the owner. (For a clear understanding of the above theory, the reader should turn again to our chapter on the "Effects produced on Value by Competition.") Our account of the theory clearly shows that *it is not the rent that determines the rise in price, but, on the contrary, it is the rise in price that determines the rent.*

At a later stage, as population continues to increase, and requires a further augmentation of the means of subsistence, men are obliged to cultivate land of even inferior quality, that will yield (say) only 20 bushels an acre. This means a cost price of 12 shillings a bushel, and, for the reasons shown above, will raise in the same proportions the price of all the bushels in the market. Henceforward the owners of land occupied in the first instance

will note a rise in their rents to £9 an acre, and proprietors of land of the second class will now profit by a rent of £7 an acre. This "progress of cultivation," as Ricardo calls it, may go on indefinitely, its universal effect being to raise the price of food, to the detriment of consumers, and to increase rent, to the benefit of the landlords, whose incomes are swollen without any exertion on their part, and whose prosperity is derived from the impoverishment of the community.

It has been objected, Are men always compelled to increase production by putting new lands under cultivation? Cannot the required increase of production be effected on the good land? Certainly it can; but in virtue of the law of disproportionate returns, every increase of returns above a certain limit will require a more than proportionate augmentation of expenditure, and will consequently involve a rise in the expenses of production. Thus if land which yielded 35 bushels an acre for £12 is now required to bear 70 bushels, the additional quantity may be obtainable, but it will probably be necessary to spend £35 to £40, and the price of each bushel will therefore rise to £1 or more. Thus the final result will be the same. Our chapter on the "Law of Decreasing Returns" should be read along with this account of Ricardo's theory.

The theory is now somewhat out of favor, for it is held to be too pessimistic both by economists of the optimistic school and by socialists. At the present day so much confidence is felt in progress that men feel it difficult to believe that agricultural production is destined to go from good to bad, and from bad to worse. Although we ourselves have admitted the law of disproportionate returns which may at some future date justify Ricardo's sinister predictions, we have expressed the opinion that that day was still far distant and might be almost indefinitely postponed.

A theory which was exactly the opposite to Ricardo's, and which won some favor in its day, was propounded by Carey, the American author. His attempt was to show that the progress of cultivation was carried out in precisely the reverse order. In

his opinion the most fertile lands are the most difficult to clear in consequence of their very fecundity, which takes the shape of exuberant vegetation and huge forests and marshes with the concomitant miasma and fever. To put these under cultivation, then, agriculture will have to be equipped with more powerful weapons and methods. This theory is true for a budding society: when Carey propounded it, it still held good for the United States; but it is no longer applicable to the United States of to-day, and centuries ago our European countries passed beyond its scope. No one but a man who had lost his senses could now assert that in France or in England the most fertile land was that which still had to be put under cultivation.

Although we may not entirely accept Ricardo's law and a historical "progress of cultivation," it is nevertheless incontestable that the value of land is destined to increase without limit in consequence of causes which have nothing to do with the existence of any landlord whatever. For land has three characteristics which *no other wealth* possesses in the same degree: *firstly*, it answers to the essential and permanent wants of the human race; *secondly*, it is limited in quantity; *thirdly*, it lasts forever. From such facts we can easily perceive that its value must persistently tend to rise in proportion to social development. The increase in population is the principal cause; for naturally the more men there are, the greater are the supplies of food that they require from the land, and the wider the space they need for their abodes. From the consideration of this has been drawn the somewhat too sweeping formula that the value of all land is in direct ratio to the number of men it bears upon its surface. Thus it has been calculated that by the mere fact of his arrival each emigrant increased by about $400 the value of the territory of the United States. As more than 13,000,000 emigrants have disembarked on those shores since the beginning of this century, that alone must have given to American land a surplus value of more than $5,200,000,000.

Other causes — namely, the general increase of wealth, the making

of roads and the cutting of railways, the growth of large towns, the development of order and of security — have inevitably contributed to heighten that surplus value of land which English economists call by the expressive name of *unearned increment*.

Naturally enough this surplus value of the earth has been the most strikingly shown in new countries such as the United States, for it is there that these diverse causes act with the greatest intensity. From the surplus value of the land has sprung the fabulous fortune of Mr. Potter Palmer, the Chicago millionnaire; and from the same source have Henry George's theories derived so large an amount of credence. As was only to be supposed, the surplus value is less marked in older countries where the predisposing causes operate with less energy, and where the increase in population has much abated, as in France at the present day. Yet agricultural inquiries which were made in the years 1851 and 1882 show that between those dates, that is to say within a space of only thirty years, the value of land in France rose from £2,440,000,000 sterling to £3,640,000,000. The rent of land in England was calculated to be £20,000,000 in the year 1800, and to be £60,000,000 in 1880, having thus been trebled;[1] in the same period the population of England alone had likewise been multiplied by three: the figures are 8,890,000 in 1801, and 24,850,000 in 1879.

Only one cause tends to stop or even reverse this upward movement of the value of land. This is the competition of new countries, which results from colonization on a large scale and from great improvements in the means of transport. At the present time this competition has assumed vast dimensions and has led many people to disbelieve in the law of "unearned increment."

Economists of the optimistic school, those indeed who hold that land is the product of labor, are obliged to protest against a

[1] Mr. Giffen's figures are, for 1885, £65,039,000; for 1875, £66,911,000; showing a *decrease* of more than a million in ten years (*Statistical Journal*, March, 1890). — J. B.

doctrine which regards the landowner as a sort of parasite who monopolizes the gains of all social progress. They do not try to deny the fact of the surplus value or "unearned increment," for it is incontestable; but they explain it away by the improvements made and the expenses incurred by the landlords, and go so far as to assert that if we could reckon up all the expenditure accumulated by successive owners, we should have to conclude that there is no land whose value is equal to what it has cost.

The argument is an attractive one, but it is not accurate; for statistics show that land which has been the object of no labors of improvement, such as natural meadows, or, better still, building sites, receive the same surplus value or unearned increment as is reaped by the owners of other kinds of land. For the agricultural statistics for the years 1852 and 1882 show that between those dates the value of fields and grazing-lands, in France, of the lowest class rose from £22 16*s*. per acre to £40 3*s*., a rise of about 80 per cent; whereas the value of arable land of the best description rose during the same period from £36 10*s*. to £54, or a rise of only 50 per cent.

No doubt, if we were to add together all the expenditure made on any piece of French land, from the moment when it was first cleared by a Gaul in the times of the Druids, our total would be infinitely greater than the present value of the land; but for our calculations to be accurate, we ought also to add in all the crops yielded from the same date onwards, and then we should probably find that the land had certainly given a rent which increased regularly with the advance of time.

We often hear people say, "Land only returns 3 per cent or 2½ per cent. That is not much." They should be asked in turn, in accordance with what natural law is land bound to yield them an income of 3 per cent a year. No doubt they would reply, "Because we paid £1000 for our land, and it is only fair that it should bring in £30 a year." They fail to see that that only begs the question. It is not because £1000 has been paid for the land that it ought to yield £30. In virtue of the monopoly of

landed property it gives its possessor a rent of £30, and it is for that reason that £1000 have to be paid for it.

VII. The Nationalization of the Land.

If we regard as proved the law of ground rent or the principle of the unearned increment, — that is to say, if we believe that a great portion, if not the whole, of the value of land is due to social causes, which are collective, and entirely independent of individual labor, — we are naturally tempted to conclude that it would be just to restore that portion to those who are entitled to it; *i.e.* to society at large. For the attainment of this end several measures have been proposed, which are usually termed systems of *land nationalization*.

Firstly. One scheme would be to do away with perpetuity in landed property, and would make it resemble what lawyers call an emphyteusis, or, more simply, a temporary concession. The State, as nominal proprietor of the land, would grant it to individuals for the purpose of working it, for periods of long duration, for fifty, seventy, or even ninety-nine years, as is the case with railway concessions. On the expiration of the term the State would re-enter in possession of the land (as it will about the year 1948 for the French railways), and would then grant it again for a fresh period. But the obtainers of the new concession would now have to pay the equivalent of the surplus value, by which they would benefit, either in the shape of a lump sum or as an annual rent. In this manner the State, as the representative of collective society, would receive the whole of the unearned increment, which would sooner or later bring in an enormous revenue.

Such a system would not be irreconcilable with an effective cultivation of the land, as is too hastily asserted, especially if care was taken to renew the concessions some time before the expiration of the term. Certainly such a system would be more conducive to successful farming than the actual state of things in countries such as Ireland, or even England, where almost the

whole of the land is cultivated by tenants at will, who can lose their tenancies at the landlord's pleasure.

The execution of such a project would meet with an insurmountable obstacle in the prior operation of the buying back of the land, if that were done with due regard to equity, for that operation would be absolutely ruinous. Take the case of France. The total value of landed property in France may be estimated to be £4,000,000,000 sterling. Let us grant that the purchase could be effected at this price; then it would be necessary to borrow that sum. Let us further suppose that so huge an issue of bonds would not damage the credit of the State, and that it could still borrow at 4 per cent. Even then £160,000,000 would have to be entered on the expenditure side of the accounts of the State. On the other hand, we should have henceforward to deduct from the receipts all the taxes that at present fall upon land, for these would clearly be wiped out by *confusio*, the creditor and the debtor being one and the same. Thus the deficit would be nearly £200,000,000. True enough, *per contra*, the State receipts would be increased by the whole amount of rents; but, according to the same statistics, the net return from land is a little less than 3 per cent. If, once more, we grant that the State would be able to work the land as profitably as private persons can, the receipts under that head would be less than £120,000,000, though the effects of the law of surplus value would bring about a progressive increase. Thus, when all is said and done, the finances of the State would for a long period be burdened by an enormous deficit, which could only be met either by overwhelming the country with taxation, or by a headlong plunge into bankruptcy.

Hence we can only seriously think of resorting to such a system of land-nationalization on the hypothesis that no purchase need be made. This hypothesis is realized in new countries which are not yet fully peopled, such as Australia, the United States, some of the South American states, and Siberia. In those regions the State has granted to colonists, either gratuitously or at a nominal figure, the deeds which guarantee property in perpetuity. But

the system might very well be altered. The State might retain the ownership of the land, and only concede temporary possession, which should, however, be of sufficient duration to insure the opening-up and cultivation of the holdings. This has been done by the Dutch government in its large colonial possessions. It is the owner of the land, but does not sell its estates, merely conceding them for periods of seventy-five years.

In old countries, too, this system might be adopted with regard to mining concessions. Henceforth the State might make it a rule to assign a fixed limit to all new concessions of mines, say for fifty or perhaps ninety-nine years, and to grant these concessions in the future, or to renew them when they expire, by means of auction to the highest bidder. Unearned increment applies to mines more powerfully than to any other form of property. The value of the coal-mine concessions in the Department of the Pas-de-Calais has risen from £1,080,000 in 1853–63, when they were first granted, to £11,840,000 at the present day. Thus in thirty years the value has been multiplied by more than ten.

Secondly. The second system which was proposed by the two Mills, and has latterly been revived by Henry George,[1] under the name of the "one-tax" system, would be to lay on landed property a progressive tax, the increase in which would be calculated to absorb the unearned increment or surplus value as it is produced, and allow of the abolition of all other taxation.

The great practical objection to this plan is that there are usually two elements in the surplus value of land: one arises from the social and extrinsic causes already set forth, but the other may result from the owner's labor and from the advances he has made. Were we to establish such a tax, we should have to be careful to abstain from touching this second element; not only

[1] Similar ideas were eloquently expounded by Patrick Edward Dove. See J. W. Sullivan's paper in the *New York Twentieth Century Library* (No. 12, 1890), with the question-begging title, "Ideo-Kleptomania." See, too, the author's article on "Quelques doctrines nouvelles sur la propriété foncière" (*Journal des Economistes*, May, 1883). — J. B.

for fear of violating the principles of equity, — for this portion of the increment is the product of labor, — but also for fear of discouraging all initiative and all progress in agricultural operations, which, we are aware, even now go too much by way of routine. Now it is impossible to follow out such a plan.

Still without resorting to these extreme measures, the monopoly of landed property and the law of the surplus value or unearned increment might be rendered almost harmless were free access to property granted to all men and free circulation of land insured by legislation adapted to such an end. What does it matter if the right of property in land is perpetual, if it is mobile and only abides for a time with each possessor? Thus the perpetuity of the right becomes a mere phrase (Clark, "Influence de la terre sur le taux des salaires," *Revue d'Économie politique*, May–June, 1890). We must now consider the means of effecting this.

VIII. The Organization of Landed Property.

The organization of landed property and the laws which regulate it clearly depend on our conception of the institution of landed property itself.

If, as we hold, the legislator admits that such property is based on social utility and that its *raison d'être* is the necessity of obtaining from the soil the maximum quantity of articles of subsistence, he must clearly endeavor to place land within the possession and keep it in the hands of those who can obtain the largest returns from it; *i.e.* those who cultivate it.

A school, whose motto is "the land for the peasants," declares that land ought exclusively to belong to those who cultivate it with their own hands. That is too sweeping a statement; for, without himself putting his hand to the plough, a man can well enough receive good returns from the land, and can farm it productively, at the same time cultivating it more intelligently than peasants can. Thus it is wise that we should have large farmers to work side by side with peasant proprietors, but only in

sufficient measure to serve as an example and a stimulus. On the other hand, peasant proprietorship should be recommended as the general rule. The following is our reason for this opinion. Large holdings cannot do without hired labor; but in agriculture hired labor necessitates a terrible waste of work. *Firstly*, superintendence is far more difficult than it is in a workshop or factory, and the wider the estate, the greater is the difficulty. *Secondly*, the results of the work done by an agricultural laborer cannot usually be appraised until after the expiration of a very long period, and even then in a most uncertain fashion. *Thirdly*, the industrial employer's valuable resource of piece-work cannot be widely applied in agriculture, for thorough performance of the work is of more importance than rapidity.

Some systems of legislation have, from political motives, been employed to obtain a diametrically opposite result to what has just been advocated; *i.e.* to concentrate and retain landed property in the hands of ruling classes who govern but do not cultivate. Such is the English system of property. Primogeniture, entails, the formalities required for and the expenses incurred in each alienation, have placed the proprietorship of almost the whole territory of the British Isles in the hands of a few hundred families who compose the House of Lords. This system has raised up a wealthy aristocracy over the heads of the poverty-stricken people, and shows the spectacle of enormous fortunes which are acquired without labor and grow, as it were spontaneously, in idle hands. We do not deny that this method may have conduced to the political greatness of the British Empire; but in our opinion it is not only inequitable, but is also calculated to ruin irretrievably the very institution of landed property in the eyes of the general public. Thus nowhere has it been attacked more vigorously than in England. A proof of this is the prodigious success lately achieved in England by Henry George's works and his plans of land nationalization, and the measures taken even by the most Conservative of ministers for the modification of the Irish land system. There are estimated to be about 1,200,000

owners of land in the British Isles, but the immense majority of them, three-quarters at least, only possess an insignificant area (less than an acre, a small cottage with a garden attached). We can obtain a more accurate idea of the distribution of property in the British Isles if we recall to mind that half of England and Wales is possessed by 4500 persons, half of Ireland by 744 persons, and half of Scotland by only 70 persons.

The case is different in democratic countries, particularly in France. There the laws tend not to hinder, but to favor with all their might, the *divisibility* of the land by means of the law of equal division amongst all the heirs, and the *transmissibility* of land by the prohibition of entails and the limitations imposed on the settlement of estates held in mortmain. The result has been that the possession of part, at least, of the land has been obtained by those who have to cultivate it; and hence has arisen that vigorous race of French peasants whom English economists regard with envious eyes, and whose very existence should long serve to baffle any attempt to introduce the collectivist system into France.

The total number of landowners must be estimated to be 7,000,000 or 8,000,000. That of itself is an imposing figure; for together with the members of their families, these land proprietors probably constitute more than half the population of France, or a proportion which is most likely higher than is the case in any other country. Nevertheless, most of these plots are exceedingly small.

Various remarks must be made as to the French laws relating to land. Article 826 of the French Civil Code decrees that division of property shall be not only equal in value, but shall also be an equal division of the actual[1] property itself, so that every estate, whether large or small, is mercilessly divided into pieces on the owner's death. This method has been keenly and justly attacked, especially by the Catholic school and by Le Play's fol-

[1] The French term, "*en nature*" means that each co-heir shall have an equal share of each kind of property, whether real or personal.

lowers. It can be seen that the intention of the law is to prevent the formation of large estates, both on political and on economic grounds (*latifundia perdidere Italiam*); but, when in each generation it violently parcels up agricultural lands, the peasant's plot as well as the large landowner's estate, and thus destroys a large number of them by breaking their unity, it gravely compromises the interests of agriculture, without being able to plead any benefit to the democracy.

The French law is also inconsistent in decreeing inalienability in certain cases; for instance, as regards the real estate of women married under the dowry system, and particularly in burdening the succession to estates with enormous government duties, which usually amount to 10 per cent, and assume even higher proportions for small estates.

It may now be asked whether free trade in land is the surest means of attaining the end we have in view; namely, the granting of proprietorship in land to those who can turn it to the best account. The Liberal school affirms that this is the case, relying upon the principle that under the working of free trade articles go spontaneously into the hands of those who can best utilize them. We have ourselves admitted the truth of this law.

But land cannot be assimilated to any commodity, or even to an instrument of production, the purchase and sale of which are determined solely by economic motives. Men have other aims when they seek to obtain possession of the land; namely, political power, social standing, or the pleasures of a country life. By these motives they may be led to extend their possessions without why or wherefore, and, in particular, to refrain from selling their lands, even when they can no longer cultivate them usefully.

Indeed, experience shows us that in more than one instance free trade in land has brought about the ruin of small proprietorship in the interests of large proprietorship or of speculation, has taken land away from those who cultivated it, and has led to the creation of an agricultural proletariat. Such was the result in parts of India of the too hasty introduction of private property,

together with the right of alienation; and the native population of Algeria will certainly be affected in the same manner if the principles of the Torrens Act are there applied without the taking of due precautions. Our conclusion, therefore, must be that when free sale has not been sufficient to effect a distribution of landed property which is in harmony with the real aim of that institution, the legislator must interfere, and introduce compulsory modifications.

The possible methods of legislative interference are difficult to indicate with precision, for they must vary according to circumstances. Still we may make the following suggestions: —

A maximum might be assigned to the extent of land that can be owned by any one man, so as to avoid *latifundia*, or huge estates. At present in Scotland one landowner of himself possesses 1,326,000 acres.

On the other hand, a minimum might be fixed so as to prevent an excessive subdivision which is prejudicial to successful farming. Any landlord who leaves his land uncultivated might be expropriated in the interests of the public.[1] In China all land in that condition has to return into the possession of the State, and in England the Radical party has proposed a bill for that purpose.

The exchange of small portions of their land might be made compulsory even for refractory owners, if these plots are intermingled in too confused a manner. Such a provision has been adopted in some of the German states.

It might be declared inadmissible to practise sale or any other form of transmission with regard to a certain extent of land. Thus the family estate would escape the clutch of creditors. This institution, under the name of the *Homestead Law*, is, as we have previously mentioned, in existence in the United States.

Finally, farm rents might be subjected to certain conditions as regards their amount in money, the duration of the tenancy, the

[1] The English public were made familiar with this idea by the motions made from time to time by the late Charles Bradlaugh in the House of Commons. — J. B.

amounts payable for the surplus value or the unearned increment, and for improvements made by the holders, and so forth. The English government has been obliged to interfere in this fashion most rigorously, it might even be said in a socialistic manner, with reference to the property of Irish landlords.

Even the French Civil Code cannot be said to be an example of perfect freedom in the disposal of landed property; for, as noted above, it decrees a division of the land on each succession caused by the death of a proprietor.

Part II. — The Various Classes of Sharers.

When we observe the manner in which our fellow-men live and the sources whence they obtain their living, at first sight the conditions seem to be so varied and so complex that we appear to lose all our bearings. Still after a little thought it becomes fairly easy to distinguish certain great classes, which we can recognize by some moderately well-marked characteristics. There are as many as five of these categories.

The first class comprises peasants, landowners, artisans, and shopkeepers, who possess an instrument of labor, whether in the shape of land or of capital, which they utilize to advantage by means of their own personal labor. With them may be ranked the liberal professions: barristers, doctors, artists, and so forth, who also live by their personal work, by selling their services directly to the public, and who always possess the capital which is necessary for the exercise of their profession. Their income is derived from what is usually called their honorarium or fees. Unfortunately in the vocabulary of political economy there is no specific name for the entire class. As their special trait is to labor independently of all other persons, we shall call them *autonomous producers*. The particular form of income which they receive also lacks any denoting term.

Those of the second category possess land or capital in too large a quantity to utilize advantageously by their own personal labor. They are therefore obliged to employ other men's labor. In economic language they are called *employers* or *capitalists*,[1] in popular speech they are termed *masters*, and their share receives the name of *profit*.

[1] The French term is *entrepreneur*.

Next come the proletariat: as their only property consists in their pair of arms, for a purpose of earning a living they are obliged to put themselves in the pay of capitalists or landowners, and have to receive from them the instruments which are indispensable for production. They are generally termed *wages-earners* (*salariés*), or less definitely *workmen*. Their share is designated *wages*.

This class might include (so at least is the practice) all *public servants* who receive a salary from the State, municipalities, communes, or parishes, and so forth. In France there are as many as 500,000 of these, and the army contains as many more. However, as these persons are employed by society as a whole and not by an individual, their position, legally as well as actually, is very distinct from that of workmen, and properly speaking they ought to be placed under a special class.

Domestic servants incontestably fall under the head of the working classes, and their income bears the name of wages.

A fourth class consists of those who do nothing and live on the particular income that they receive from any form of capital, land, houses, or capital properly so-called; these various returns are called *land-rent*, *house-rent*, *interest*, or *dividend*. The recipients are termed *people of independent means*, or *annuitants* (*rentiers* in the original).

Besides these great divisions, there is another category which is less apparent, but which cannot escape unnoticed in spite of the shadow in which it lurks. This contains all those who live neither by their labor, for they do nothing, nor from their income, for they have none, but solely on public or private charity. These are called the *indigent* or *pauper* classes, and what they live on is termed *alms*.

The first and third of our divisions form the very large majority of the people of every country; the three others are in the minority.

The reader may be surprised to find no mention of landowners, but in our opinion there is no reason to make them into a distinct

class. The peasant proprietor ranks as an autonomous producer, the landowner who works his estate for a profit is a master or employer, the owner who lets out his land in farms is of the annuitant class. The usual practice of putting under the same heading social conditions which are so entirely different, is contrary to all scientific principles of classification.

We are often told that there are no classes nowadays; it would be better if we were to say more modestly that there are no longer any *castes*. The latter statement is true for two reasons.

Firstly. There is no legal obstacle that prevents a man from passing from one class to another, if he is able to do so; as a matter of fact, there are people who rise from being wages-earners into the class of autonomous producers, of masters, or even of annuitants. Moreover, there are others who fall down into the indigent class.

Secondly. The same person can very well belong to several classes simultaneously, and such a state of things is exceedingly common. Many small producers, most masters, and even some wages-earners possess a large or small amount of stock and municipal or railway debentures, and in that respect can be ranked as annuitants. Again, many wage-receivers obtain public relief and therefore also belong to the indigent or pauper class. It is this overlapping and blending that make it impossible to draw up statistics as to the various classes of sharers.

However, the above categories possess specific characteristics, which are clearly enough marked for us to be able to use the word "classes" in the scientific meaning of the term.

CHAPTER I.

THE AUTONOMOUS PRODUCER.

I. Why this Condition is the most Favorable for a Fair Distribution of Wealth.

THE autonomous producer, as we have defined him, is the man who labors on no one else's account, and makes no one else work for him. He suffices for himself, and receives the whole of the product of his labor, without any other man dreaming of disputing his right to it.

The type of this class of producers is the *peasant*, who cultivates his land by means of his own arms alone (or those of his family), and with his own capital, and who reaps what he has sown. But this class also includes the artisan who works for the public, employing no other hands but his own or his apprentice's (be he shoemaker, tailor, locksmith, blacksmith, or what not), and even the *shopkeeper*, if he himself lays out for a profit his little stock in trade.

Such a system, were it generalized, would be very conducive to a satisfactory distribution of wealth. On account of its extreme simplicity it would prevent most of the conflicts that now arise between the various classes of sharers, especially between labor and capital. It would not cause the reign of absolute equality — and that would be all the better; for it would not interfere with the continuance of the causes of inequality which result from the natural differences between men, or those which arise from the unequal power of the land and instruments of production put into use, or even of the good or bad luck which is so closely associated with all the acts of man. Still it would not allow these inequalities to pass certain limits, if, indeed, we mean to

adhere to the terms of our hypothesis, and suppose that the producers employ only their own labor; for the amount of land or of capital that a man can work with his own unaided efforts is necessarily somewhat limited — a few acres, if we speak of land, a hundred pounds or so, if we refer to capital.

A society composed only of isolated producers would thus escape all inequalities save those which spring from Nature herself, or from the vicissitudes of events, and would be within a hand's breadth of realizing the ideal of distributive justice.

This class, therefore, is usually spared by the socialists in their attacks on the existing order of things. They confine themselves to declaring that its doom is irrevocable, and that those who still represent it in present day society will speedily be blotted out by the fatal progress of economic evolution. But why? Because, although this system conduces to a satisfactory distribution of wealth, it is, they say, incompatible with the requirements of large production. Isolated production means small industry and small farming, whereas the future belongs to large industry and large farming under the *régime* of collective production. To perpetuate isolated production would be to "decree mediocrity in everything."

Karl Marx, in his *Capital*, recognizes the advantages of a system under which the laborer employs his own capital, "just as the virtuoso plays on his instrument." "But," he continues, "it excludes concentration, co-operation on a wide scale, the use of machinery, the application of man's knowledge to the subduing of nature, concert and unity in the ends, the means, and the efforts of collective activity. It is only compatible with a narrow and limited state of production and of society."

On this point economists are at one with socialists, as may be seen in M. de Molinari's work, *L'Evolution économique au XIX^e^ siècle.*

We cannot absolutely accept this somewhat peremptory judgment.

Mediocrity in the conditions of life, *aurea mediocritas*, need not terrify us; and the ancients, who were as good judges on

this matter as we are, regarded it as one of the requisites for happiness. Even from the point of view of production no other system can better excite the maximum amount of productive activity, for each man works for himself. Moreover, whatever may be said, it does not exclude co-operation or the methods of large production, provided that it is completed by association on a large scale. Association is also necessary for the correction of the individualist or even egoistic principle, which might find in this system an environment too favorable for its growth.

Still, whatever be its virtues, we must confess that this social class is now greatly endangered by the incessant development of large industry. We need only repeat that the course of evolution may have many surprises in store for us, and may bring back once and again forms which were believed to have vanished forever. Were a means to be found of replacing the steam-engine by natural forces which could be utilized in each household, small industry might be filled with new life; and as to small farming, that not only still lives, but never ceases to extend.

France has the happy privilege of being one of those countries in which the class of autonomous producers is the most numerous, and this comprises not only the peasants, who are one of the characteristic types of the race, but also the artisans and the shopkeepers. It is this class that gives so firm a basis to the social organization of France, and enables it, better than any other land, to withstand the terrible crises of its history. The results may be a certain spirit of routine, some dulness in economic action, and an inability to see all the advantages of co-operation. Nevertheless, any possible modification of it in the future might lead men to look back with regret upon the old order.

It is rather difficult to calculate the number of peasant proprietors in France, but in any case we must disregard the common assertion that the greater part of the country is in their possession. In the first place, only a quarter of the cultivable land (nearly 32,000,000 out of 123,000,000 acres) is possessed in the state of small property; that is to say, in tracts of less than 15 acres.

Further, out of the 6,000,000 or 7,000,000 owners who share this area, nearly half possess only shreds of land of a couple of acres or so, and, as that is not enough to live on, they are obliged to hire themselves out as day laborers. The number of actual peasant proprietors, *i.e.* proprietors of a sufficient amount of land to live on, can scarcely exceed 3,000,000. Small industry (the artisan class) numbers rather more than a million, and small businesses, such as shopkeepers, inn-keepers, etc., stand for rather less than 1,000,000. As we have previously observed, we cannot congratulate ourselves on the last item. To sum up: the number of autonomous producers in France may be reckoned to be 15,000,000, which, when their families are taken into account, would make 20,000,000 inhabitants, or rather more than half of the entire population of France.

CHAPTER II.

THE MASTER.

I. The Part played by the Master, and the Legitimacy of Profits.

Our first class of isolated producers was exceedingly simple; proportionately complex is the position of this second class of sharers.

Master, or rather *employer* (*entrepreneur* in the original), which is the customary term used in political economy, is the name given to every man who possesses an instrument of production, whether land or capital, which is too large for him to work by his unaided efforts, and who has therefore to utilize it by means of the labor of hired workmen. If a man owns more than ten or twelve acres of land, he will be unable to cultivate it by himself, and will be obliged to employ day-laborers. If he possesses a capital of £300 or £400, he will be unable to turn it to account in any industrial or commercial business without resorting to other people's labor.

So far the situation seems to be a perfectly normal one. It is quite legitimate that a man who has too much wealth should employ it to supply work for those who have not enough. Nay, if we consider the matter farther, we can easily discern a fitting harmony in the fact that the capitalist can no more dispense with the laborer for the profitable employment of his capital than the laborer can do without the capitalist for the utilization of his aims.

But we are going rather too fast. The landowner or the capitalist, who employs workmen to labor on his land or with his capital, regards the product of the business, whatever it may be, whether it takes the shape of agricultural produce or of manu-

factured goods, as his *property;* and the selling-price of these products, when the cost of production has been deducted, forms his income or his *profits*. Here we reach dangerous ground; for we may ask, in virtue of what right does the master appropriate for himself a value which is the product of the labor of his workmen?

The master replies, through the medium of the economists, that the article produced is altogether his work, for without his initiative it would not exist at all; if he has not made it, at any rate he has *had it made*. He first conceived the *idea* of it, and that is the primordial and essential act of all production; he, too, has supplied the means of executing it. Who, then, should have more right to the article than he has? The workmen? But they have merely executed the orders they have received; they have only been the implements in the hand of the employer. Here is a proof: if we take two businesses that employ an equal number of workmen, we constantly see one succeed and the other fail miserably. Industry may be compared to warfare. For who wins the battle? The general. No doubt, good soldiers, and good arms likewise, contribute to the happy issue, but they are the conditions of success and not the efficient cause; this is shown by the fact that the same troops with the same material of war will be beaten if they are under a bad commander. In business matters, too, generalship is everything. The employer is the "captain of industry"; victory or defeat depends on him. If he succeeds, he alone reaps the fruits of victory; if he fails, on him alone fall the consequences of defeat, and he is punished by ruin.

The socialists shrug their shoulders at this picture, and say that the master is only a parasite, or, if the term be preferred, a speculator, whose sole business is to buy to sell again. What does he buy? The power exerted in the workman's toil in the shape of manual labor. What does he sell again? The same power of labor in the concrete form of goods. He buys it cheap in the labor market where the proletariat are obliged to sell themselves in order to live, and where the supply is always in excess. He sells it again at

a good price because he is able to make this power of labor yield all it can, by lengthening the hours of the working-day as far as possible, by enticing his men with the deceitful bait of piece-work, and by wearing out women and little children by means of machinery which turns their weak arms to account. To pay labor as little as possible and to make it yield as much as possible, that is the whole secret of the master's profits; that is the "mystery of iniquity."

The first of these two portraits is excessively flattering; the second is a distorted caricature, but both of them bear some sort of resemblance to reality.

Given the economic organization of society, it is certain that we must have the master to play his part. The elements of production are dispersed amongst a multitude of persons: on the one side, the masses who have only their arms, and possess neither land nor capital; on the other, those who have capital and land, but have no desire or intention to take to manual labor. Now to produce wealth at all, especially on a large scale, it is absolutely necessary to combine these various factors of production in one and the same productive operation. But who is to unite these scattered elements and cause them to converge to a common end? To whom is to fall the task of foreseeing men's wants, of harmonizing production with consumption, of determining the path on which the labor and capital of a country should be employed? Obviously not to the proletariat; it must, then, fall to the capitalist, and it is clear that he who establishes the business will keep the profits for himself.

Although the social function of the employer is partly forced upon us by the necessities of the economic situation, it is none the less of evil consequences; for it makes the problem of distribution almost a hopeless one, keeps up the acute state of conflict between capital and labor, and marks off society into two hostile classes. We cannot prevent workmen from thinking that they have rights over the wealth that has proceeded from their hands; we cannot prevent them from bitterly watching generations of

masters or shareholders succeeding one another in turn, and growing rich from factories or mines in which they, the workers, have also labored from father to son, and have still remained poor. True enough, as was urged by the employers' advocates, they have only been tools; but the misfortune of present society lies in that very fact that one man can be another's tool. Far different is this from the first precept of morality as formulated by Kant: always to remember that we must regard our neighbor's personality as an end and not as a means. Are there any ways of escaping from our difficulty? There are only two.

We might return to the system of isolated production described in the last chapter; but such an attempt would be utterly vain. All we can do is to strive to preserve such relics of that order as still remain.

Our other course would be to organize production on a basis of association, but not the association practised nowadays, in the form of joint stock companies, capitalists employing whole armies of wages-earners, companies which possess all the disadvantages of the employer system without its advantages; for that form of association has the most serious defect of accentuating the divorce between capital and labor, by forming two distinct classes in the same undertaking — on the one hand, the workmen, who labor in a business the profits of which they do not receive — and, on the other hand, the shareholders, who receive the profits of a business in which they do not labor, and of the very nature of which they are often ignorant. When the ownership and direction of a concern are in the hands of a company, *i.e.* a fictitious and invisible person, that ownership and authority fall greatly in the estimation of the workmen. Even from a productive point of view these collective undertakings share some of the disadvantages which are shown by great public administrations, and which would be manifested on the application of the collectivist system; namely, an absence of individual initiative, bureaucratic measures, and some waste of labor and of capital.

We should strive rather to form co-operative associations of

laborers, who would work on their own account, and use instruments of production which belong to themselves. Thus they would be able to receive the whole product of their labor. That would be a return to what should be the normal order of things, in which capital would be the instrument of labor; not as now, when labor is the instrument of capital. In that direction we must hope that the solution to be effected by the future will lie, for we ourselves can conceive no other; but when we deal with co-operation we shall see the difficulties in the way of the success of such associations. The principal difficulty is how to do without the master.

We must not forget the solution proposed by the collectivist school, with which we are well acquainted. They would put an end to the classes of capitalists and masters, by abolishing private property in capital and in instruments of production, which would then be handed over to society. Society henceforward would be the only master or employer. As it would not try to make any profits, or, what is the same thing, would pour the profits into the common treasury in the form of public revenue, the people would be freed from the enormous tribute which is now levied annually by landowners and capitalists, as profits, gains, interest, dividend, and land-rent, and which (in France) cannot be less than £320,000,000 or £400,000,000 a year.

So large a saving would certainly be worth the trouble of making, if it could be proved that these employers and capitalists are of no use, and are merely parasites. But if, as our previous explanations seem to show, these employers do play an important part, and would be extremely difficult to replace, and if, unfortunately, the forcible appropriation by the State of all agricultural, industrial, and commercial businesses, and the abolition of all individual enterprise, were to reduce the production of wealth perhaps by half, in that case we might find that we had made a very bad bargain, and the saving would cost us dear.

II. The Laws which regulate Profits.

When once we have admitted the social function of the master, whether willingly or against our inclinations, the legitimacy of profits naturally follows. We only have to determine the laws which regulate them.

As we are aware, the production of wealth requires the consumption of other wealth, in the shape of raw materials, implements, and wages (*i.e.* articles of subsistence consumed by the workmen). If the operation has been performed well, the value of the wealth produced will be higher than the value of the wealth destroyed; if the work has been done badly, the value of the wealth produced will be less than that of the wealth destroyed. This is, then, a very delicate process, which requires a nice appreciation of the wants of consumption, and demands predictions which often take long to fulfil, and in which mistakes may be easily made. The employer has to carry out this operation. If he conducts it successfully, his recompense is the excess of the values produced over the values consumed; if he has erred in his forecasts, he has to bear the difference between the values produced and the values destroyed. In that case he will lose.

The values destroyed in the process of production are what the employer calls the *cost of production;* the excess of the values produced over the values consumed forms his *net product* or *profits*. Profits are limited by no necessary law. If the employer is skilful enough to produce goods to a high value, and spends but little on them, his profits will be very great. That will be so much the better for society, for this difference of values exactly shows that relatively useless things have been sacrificed for the production of an article, which, relatively speaking, is exceedingly useful, or at any rate answers to a very intense desire.

We must not conclude from this that the employer and society take identically the same standpoint. Society measures the cost of production by the quantity of raw material destroyed and the amount of labor employed. The employer estimates it according

to the sums he has to pay out to his workmen as wages and to capitalists as interest. Now, as we are here dealing, not with a destruction, but only with a transference of wealth, — for the expenditure of the employer goes towards the income of other classes, — it matters little to society whether the expenses are increased or reduced. Take a piece of land which yields a gross produce of £2000. The owner says, "I must deduct £1600 from that for what I pay for manual labor, so that my returns only come to £400. Not a large sum, to be sure!" Very likely not; but these £1600 which are distributed among the workmen form part of the income of society as a whole. Hence it is sometimes said that, socially speaking, there is *no difference between net produce and gross produce;* but that statement is a little too wide.

As we are aware, under the action of competition the value of things always tends to approach the cost of production, and we have already more than once explained this mechanism. If, then, there is perfect freedom in industry, — if the producer is not protected by a legal monopoly, or letters patent, or protective duties, — the employer will not often make very high profits, and, in any case, not for long.

Now what is the minimum to which competition can reduce profits? Clearly we cannot suppose that it may reduce profits to zero, by lowering the price of articles to the level of the cost of production, for in that case the employer would make no gains, and would cease to produce.

The English school teaches[1] that profits are included in the cost of production. Though such a statement is somewhat startling at first, it may be justified, if we consider that profits, under the action of competition, are resolved into wages, interest, redemption, and insurance. But these are the ordinary elements of the cost of production.

Between the cost of production and the selling price there must always be a certain margin, which represents the minimum profits.

[1] Or rather, "taught." J. S. Mill is probably meant. — J. B.

We must now determine this minimum, which is composed of three elements.

Firstly, the interest and redemption of the capital employed, calculated according to the normal rate of interest in the market for capital. In every society where such a market exists — *i.e.* wherever there are people who can obtain interest for their capital, while they stay peacefully at home and do nothing — it is clear that no one will amuse himself by sinking capital in industry or trade, unless he is absolutely certain that it will yield him an interest equal to that which he would obtain from the same capital invested in securities which he has in his desk.

Still, a close glance at the numerous businesses which are carried on in any society would certainly show us some which are not sufficiently productive to remunerate at the current rate the capital which is engaged in them. How is it, then, that such a business continues to go on? We can easily explain this contradiction by looking at the nature of the capital employed. If it be fixed capital, even if we wished, we could not give it any other destination than that for which it was formed. The choice lies between abandoning it altogether, or being content with however small a return it may yield. Obviously, the latter course is taken, for it is better to lose part than to lose all. Railway and tram lines often give instances of this.

Secondly. The second element is the *premium of the insurance* against the various risks which the employer has to bear in their entirety. The object of this is not to realize gains, but to avoid loss.

If, in some branch of industry, on the average one business out of ten goes bankrupt, the premium must be high enough to compensate for bad luck; for unless the chances of profit were at least to balance the chances of loss, no one would be rash enough to enter on that line of business.

Nor is this all. Grant that the business is among the successful ones. It will be lucky if it has not one bad year out of every ten. Let us suppose that this bad year swallows up half the employer's

capital; then the other nine will have to give him a surplus which will be enough to reimburse him for that loss. We can thus see that there is considerable risk, and that therefore the insurance premium ought to be of some height.

Thirdly. The wages of the employer's labor, which is a complex labor, comprising initiative, direction, and control. This element does not figure in the profits received by shareholders in joint stock companies under the name of dividends; for such persons do nothing, and pay a manager to conduct the business. Dividends, strictly speaking, should only include interest and the premium on insurance.[1] Now the wages of the employer's labor clearly cannot be appraised in definite figures; they depend on such matters as customs, habits, and the degree of general comfort. But we may fix our ideas of the subject by saying that the sum ought to be equal to the salary that the employer would have to pay to obtain an engineer or a manager who would superintend the factory in his stead. Some manufacturers in making out their books put such a sum to their own credit under the head of salary. Obviously, if the business did not reward him for his labor in a fitting manner, the manufacturer would choose another kind of occupation in which he could better utilize his capacity or aptitude.

Such are the elements into which profits might be resolved on the purely theoretical hypothesis of a system of absolutely free competition. Naturally, as things actually go, the rate of profits will be usually above but sometimes below our limit.

Generally speaking, there is a great tendency to exaggerate the rate of profits. The circumstance that in any business the profits are accumulated in one man's hands, whilst the wages are scattered amongst hundreds or thousands of sharers, throws a false light on the respective importance of the receivers. If mastership were to be abolished and profits were distributed among all the work-

[1] In this case the shareholders over any considerable period of time would have gained only by the interest; it would therefore have been equally profitable for them to have been simply holders of debentures. — J. B.

men in the factory, in many cases each man's share would be increased only in very small measure. One instance will be enough. In 1881 the coal-miners in the whole of the Department of the Nord distributed a total sum of £821,176 in wages and £110,476 in profits (*i.e.* dividends). Thus the profits were 13 per cent of the wages; in other words, had the demands of the socialists been complied with, and all shareholders been suppressed and their dividends divided among the workmen, each man's daily wages would have risen on the average from 3*s.* 2*d.* to 3*s.* 7*d.*

Further, each of these elements is itself variable, and the usual doctrine is that each of them tends to fall progressively, whence it is concluded, by a perfectly logical deduction, that the rate of profits itself tends to fall. The rate of interest, we are told, falls in proportion to the increase of capital; the premium of insurance against risk diminishes in accordance with the reduction of such risks, and finally the wages of superintendence grow lower in proportion as the spread of education makes such labor of management accessible to all. To our mind these assertions are very hypothetical. When we speak of the fall of the rate of interest we shall discuss this topic again.

III. Whether the Rate of Profits is in Inverse Ratio to the Rate of Wages.

According to Ricardo, the rate of profits always varies in inverse ratio to the rate of wages.[1] This statement gravely offends the economists of the optimistic school, for it supposes a permanent and necessary antagonism between the interests of masters and of workmen. However, it is perfectly substantiated if we only add,

[1] It is to be remembered that, to Ricardo, high or low wages meant a large or small proportion of the product as compared with profits. If the price doubled without any alteration in the said proportion, he would not have said that the rates had altered at all. See Ricardo's *Pol. Econ. of Tax.*, Chap. VII. — J. B.

as we should do in enunciating all scientific propositions, the words *ceteris paribus*, "other things being equal." For, if the products of the business become greater, it is clear that the rate of wages and the rate of profits will be able to increase simultaneously without there being any contradiction. Take a piece of cloth which is sold for two shillings; let one shilling go to the master and the other shilling to the workman. Now if in this factory, the number of hands and the capital engaged remaining the same, but the methods being improved or the labor being executed more intelligently, four pieces of cloth are produced which are worth eight shillings, then the master's share and the workman's share, profits and wages, might also be quadrupled, *i.e.* rise simultaneously to four shillings. No doubt it is somewhat absurd to imagine that the production of any manufacture can be made fourfold whilst the old prices are kept up. But, even if we grant that the price of each piece of cloth is reduced by half and falls to one shilling, the total value of the four pieces will still be double the former value of the produce, *i.e.* be four shillings; thus profits and wages can even now be simultaneously doubled.

This explains how it is that in new countries, such as the United States and Australia, we see at one and the same time very high wages of 8, 10, or 12 shillings a day, and profits which amount to 15, 20, or sometimes 100 per cent of the capital employed. For in such societies, which combine the methods of the most advanced civilization with the resources of a still virgin land, productive power is at its acme, and, as the gross produce of each productive operation is far greater than it usually is in Europe, the portion that falls to each of the sharers may also be much larger.

It is a remarkable fact that these high profits and high wages by no means prevent the industries in such countries from frequently producing at a cheaper rate than is the case in other lands where wages and profits are lower, say in India, where manual labor may be had for the asking. We can easily account for this paradoxical result by showing that the greater height of the wages is more than compensated for by the productive superiority of the

laborers. The labor of an English workman who is paid eight shillings a day may be much cheaper than the labor of an Indian coolie who receives only sixpence a day. That would clearly follow if the former made thirty or forty yards of cotton stuff *per diem*, whilst the latter only made one.

The argument often urged by protectionists is therefore as devoid of a logical basis as it is contrary to facts — their dictum being that, as free trade establishes competition between all countries, its result must be to drive down wages by conferring the superiority on the country which can pay its workmen least. In reality international competition gives the upper hand, not to the land where wages are lowest, but to the one where productive power is the greatest.

CHAPTER III.

THE WAGES-EARNER.

I. The Contract of Wages.

THE following preliminary observations are necessary: The classical school uses the term wages-earner (*salarié*) in a very wide sense. Some, indeed, in imitation of Mirabeau, who used to say that the landowner himself was only a wages-earner, indiscriminately put all classes of society into this category. Most include, at least, all those who exchange their services for money, *e.g.* barristers, doctors, public officials, and even artisans who work to order. We must not be deceived by this abuse of the word "wages-earner," for its sole object is to represent wages as the most general and the most legitimate mode of remuneration.[1] Scientifically, the word "wages-earner" can only be applied to men who labor *for another man*. Those who work for *the public* are not "wages earners"; and popular speech is correct in this respect, for it uses the term "wages" only for the former class. Other men may have salaries, *honoraria*, fees, etc., but not wages.

The wages-earner and the master are a pair of characters whose lot is altogether different, but whom fate has inseparably bound together; there is little love lost between them, but they cannot obtain a divorce. The man who possesses nothing but his arms can produce nothing whatsoever, unless he receives an instrument of production; but, under the present economic organization, no one can supply him with this instrument save the landowner or

[1] A chief offender is Max Wirth, who regards *conquest* as an achievement of skilled labor getting its due wages. See Lange, *Arbeiterfrage*, page 139. — J. B.

the capitalist. Similarly, however large be the instrument of production that he owns, neither landlord nor capitalist can reap any returns from it without using the arms of other men.

Now, since the force of events has thus associated labor and capital, the easiest thing to do would seem to be to make a real contract of partnership. The laborer might say, "I have contributed my bodily strength; you have contributed your capital; let us share the proceeds." In such a course alone must we endeavor to find a solution of the problem. But the simplest solutions are often those for which we have to wait the longest; and though this solution is not an impossible one, as some economists assert, still it is certainly not on the eve of realization.

For partnership requires that the partners shall have a certain equality of position and a certain community in their aims. Such conditions are wanting when we put together the poor man and the rich man, the proletariat and capitalists. The latter seeks to make his fortune, the former strives to earn his living; the one speculates on more or less distant results, the other has to think of his daily bread; the motto of the one is "Risk nothing, nothing gain"; the other can risk nothing, for there is naught that he can lose.

Hence the failure of partnership between capitalist and laborer, and the substitution in its stead of the wages-system. This system is a bargain, by the terms of which the workman surrenders all rights to the product of his labor, in consideration of a fixed sum which is payable either weekly or monthly.

This contract contains a double advantage. The employer is left with the definitive ownership of the produce, and the entire control of, and responsibility for, the business; the workman is guaranteed a sure reward, which is immediate, and is independent of all risks that may attend the business.

There is nothing intrinsically unjust in such a contract, for we see it resorted to by other classes of sharers. Thus the capitalist, if he has transactions with the employees, usually prefers the bargain for a fixed sum, which is called loan at interest, to the

contract of partnership termed a sleeping partnership. Similarly, the landowner, when dealing with that species of employer whom we term the farmer, commonly prefers the form of bargaining called rent to the contract of partnership known as the *métayage* system. In both cases all rights over the produce are voluntarily surrendered in exchange for a fixed annuity.

However, for a contract of this kind to be equitable, the contracting parties should be on an equal footing. That is the case in the instances given above. The lender and the landowner are certainly on an equal footing with the borrower and the farmer; nay, they possess a superior position, in virtue of which they will not abandon their eventual rights to the produce, unless they are equitably compensated. Thus the balance is usually on their side, and that is evidenced in the terms of the contract. But in the contract of wages the positions are reversed. It is the master who holds the whip-hand over the laborer; and there is great fear that the latter, pressed by want, will do as the hungry Esau did, who sold his birthright for a mess of pottage.

Further, leaving the high ground of justice, and using the criterion of social utility, the contract of wages is seen to have a vice which absolutely condemns it. As soon as the laborer surrenders his interest in the product of his labor, he loses all stimulus to production; nay, it is obviously to his advantage to do as little work as possible in return for the price the master pays him for his labor. He can only be made to act otherwise by the sentiment of duty or the sentiment of fear; fear, not of the whip, as the slave feels, but of dismissal, and of the loss of his livelihood. The first of these motives can only influence minds of a higher stamp, and, moreover, grows weaker as the antagonism between masters and workmen becomes more pronounced. The second motive — and human nature may boast of the fact — has never wrung any good results from man.

Further, the interests of masters and workmen inevitably clash, and the wages-system does not become more bearable for its fatal offspring, the strike. No one denies that the contract of wages is

advantageous in certain special cases; but what is contrary to nature is that this form of contract should become the general law of present society, so that, of their own free will or not, the laboring masses are dispossessed of all rights over the produce of their labor, and are deprived of all interest in the work of production. Such a state of things can scarcely be regarded as final. We must add that the classical school will not admit this conclusion; in its opinion, the wages-system constitutes a contract which, besides being legitimate and salutary, is also definitive.

II. The Laws which regulate the Rate of Wages.

Are there really any natural laws that regulate the rate of wages? The search might almost seem to be an idle one; for wages vary in amount from one trade to another, and from one place to another, and in each individual instance are determined by a conflict between master and man.

But the price of a thing also varies according to the nature of the article, the time, and the place; it is the result of a free struggle between buyer and seller; yet that does not hinder us from investigating the laws which govern prices.

There is no contradiction in this. No doubt, prices and wages are determined by agreements entered on by men; but these very agreements are fixed by general causes which it is our business to discover. Our belief in the existence of natural laws in political economy must lead us to hold that men, when making contracts or agreements, are influenced by psychological motives or exterior circumstances which have a general nature and can be disentangled from the confused mass of particular instances. Besides, it is not accurate to say that wages, any more than prices, are fixed by individual agreements; on the contrary, just as there is a general price for commodities, which is only slightly affected by individual bargainings, so, too, there is a general rate of wages for every kind of labor which is as binding on employers as it is on their workmen.

An inquiry into the laws which govern the rate of wages is, therefore, an investigation of the general causes which have made wages higher at the present day than they were half a century ago, and better in the United States than they are in Europe: it is also an attempt to forecast whether the general tendency of wages is to rise or to fall.

The problem might be set in a purely abstract way, viz. What *ought* to be the rate of wages in an ideal state? In other words, Given the capital and labor engaged in any business, what share ought to fall to each?

Say that Robinson Crusoe furnishes Man Friday with a canoe and nets. As the result of his day's work Friday brings home ten bushels of fish. How many are to go to Crusoe (capital)? How many to Friday (labor)? In these terms the problem is insoluble, but many economists have sought to find an answer. Von Thünen, a German economist, tried to solve it mathematically in his striking book, *Natural Wages*. His view is that the natural wage is the geometrical mean between two factors. The first is the value consumed in the maintenance of the laborers; the second is the value produced by their labor. Let a = necessaries and p = product; then Wages = $\sqrt{ap}$. (See Roscher, *Nat. Ök. Deutschland*, p. 895.)

In his *Principii d'Economia pura*, M. Pantaleoni has tried his hand at the problem. Less ambitious than Von Thünen, he confines himself to an attempt to determine two fixed limits between which the amount of wages falls. His method is to find out the advantage which each of the parties (taken as *isolated*) might have obtained. Say that Friday *by himself* could have filled 3 baskets of fish; that figure, 3, is the lower limit of his claims. Say that Crusoe by himself could have procured 3 from his capital. Then under no circumstances will he give Friday more than 7, for in that case his collaboration with Friday would do him no good. Friday's wages, then, will be somewhere between 3 and 7. But, if we make the feasible supposition that neither Crusoe nor Friday has obtained aught by his unaided

efforts, that the value of the isolated capital, and the value of the isolated labor, is in each case *zero*, then the solution of the problem is perfectly indeterminate.

Under the present organization of economics labor is but a commodity which, under the name of manual labor, is bought and sold in the markets like any other article. More properly it is "hired" or "let"; but the distinction has not that importance in economics which it possesses from a legal point of view. The price of manual labor, then, must be absolutely determined by the same laws as regulate the prices of other commodities. The complex laws which we discussed when considering value are summed up in the formula of supply and demand; in brief, the value of things is determined by their utility and by their quantity. The price of manual labor, then, must depend both on its utility and on its rarity. Its utility means the productive power of manual labor in a given country at a given time, and the need felt for its assistance; its quantity signifies the number of laborers who have only their arms to depend on, and who offer them in the market. This is the expression of what is, not of what ought to be; we shall see that a reaction has set in against this natural law, and that the workers are beginning to escape from it.

Various economists have expounded three great theories, each of which, respectively, has endeavored to express the law of wages by a single formula which connects it with one only cause. That, in our opinion, constitutes the incompleteness of all of the theories. As was the case with profits, we shall be confronted by the battling theories of the socialist school and of the optimists.

Section 1. The Theory of the Law of Brass.

The socialist school declares that, with the present organization of economics, wages can never rise above the minimum explained above; and that this minimum is also the maximum that wages can attain. The following is the line of argument.

Manual labor, or the power of labor (*Arbeitskraft*), is under present conditions merely a commodity which is sold and bought

in the market in the same way and according to the same laws as every other commodity: workmen are the sellers; masters are the buyers. Now all commodities are subject to the law that, wherever competition can be freely exercised, their value is determined by their cost of production. This is what economists call *natural price* or *normal value*. The commodity, manual labor, cannot escape this rule. Its price, therefore, that is to say, wages, is determined by its cost of production. To quote Lassalle, *Bastiat-Schulze-Delitzsch* (Chap. IV), "Just as the price of all other commodities, is the price of labor determined by the relations between supply and demand. But what is it that determines the market price of each commodity, or the average relation between the supply and demand of any article? The expenses necessary for their production."

We must now learn the meaning of the words "cost of production" when applied to the laborer considered as a material object. In the case of any piece of machinery, the expenses of production consist (*a*) in the value of the coal it consumes, (*b*) in the sum that must be yearly put by to redeem it; *i.e.* to replace it by another one when it is worn out.

Similarly, the cost of production of labor is composed (*a*) of the value of the food and other articles that the workman must consume in order to keep in good health, *i.e.* to be in a fit state to produce; (*b*) of the redemption premium that is requisite to replace the laborer when he can no longer work, *i.e.* to rear a child till it is grown up.

In brief, wages must be regulated by the value that is absolutely necessary for the support of the laborer and his family, or, more generally, for the subsistence and propagation of the laboring population.

Such is the theory usually known as the *Law of Brass*. Enormous success has attended this sonorous term which was invented by Lassalle, and since then it has rung forth in all the manifestoes of the labor party as if it were a refrain of a *Marseillaise* of socialism.

We must observe that though this theory was baptized and

brought into public notice by the collectivist school, it was first formulated by the classical school. Turgot was the earliest author of the statement that "in every kind of labor the workman's wages must fall to a level solely determined by the necessities of existence." (*Distribution des Richesses*, § VI.) Almost identical words were used by J. B. Say and Ricardo, and greatly have they been blamed for them.

Whoever originated the idea, the name is an excellent one if the theory is believed to be correct; for it burdens the working classes with the hardest yoke that could be conceived, and reduces them to a truly hopeless position. For in what way can the workman improve his condition? Can he hope to gain more by working harder and better? By no means. As his wages are independent of the productivity of his labor, his power of labor will produce only for the master who has bought it, and to whom alone its fruits will fall. Let him beware, then, of falling into the snares that will be set to induce him to make his labor more productive, — say the offer of work "by the job," or even a share in the profits. If he is victimized by these artifices, which are purely baits to wring from him the maximum of production, he will be simply playing the master's game without benefiting himself.

But can he not trust that he will improve his position by keeping down his expenses and living soberly? Again, let him beware, for that would make his lot the harder. Since the rate of wages is always on the level of the bare means of existence, as soon as the laborer learns to reduce them, wages will fall in like proportion. If the modern workman were simple enough to accustom himself to subsist on potatoes like the Irishman, or on a handful of rice like the Chinese coolie, his wages would soon be merely the sum that is absolutely necessary for the purchase of a few sacks of potatoes or bushels of rice. His frugality and his thrift would be turned against him, and he would be ensnared by the very virtues which he is exhorted to practise.

Can he not, at least, expect something from the progress made in production and the increase of wealth? No! that would be

the very worst of all for him. If scientific discoveries were to improve machinery, and thus lower the value of food and other necessary articles, his wages, which are regulated by them, would be decreased in the same degree. Were such progress to be made that an hour's labor would produce enough for one man's daily wants, the workman would still have to labor for twelve hours: in the first hour he would earn his wages, the other eleven would go to his employer's gain.

This theory, which is impressive in appearance, is really a play upon words. If we take it literally as meaning that the workman's wages can never rise above what he absolutely requires to live on, it is obviously contradicted by facts. The purely material wants of animal life are, on the whole, of no very great importance for man. Irish peasants and French peasants, when far from towns, live on practically nothing. If, then, this indispensable minimum for the support of physical existence were to determine the normal rate of wages, wages would be far lower than what they actually are in all countries. A literal interpretation of the theory would not explain why the rate of wages should be higher in one employment than in another. Engravers and mechanical engineers receive twice or thrice as much as navvies. Do they require a greater quantity of nitrogen or carbon? Why are the wages of agricultural laborers lower in winter, when they are obliged to spend more on fires and clothing, and higher in summer, the very time of the year which renders life so much easier for the poor that poets have been justified in calling it "the poor man's season"? It does not explain why wages are higher in France than they are in Germany, or higher in the United States than in England; for there is no reason why a Frenchman should eat more than a German, or an American more than an Englishman. Nor does it account for the undeniable fact that wages to-day are higher than they were a century ago. Do we eat more than our forefathers did?

If we discard this literal interpretation, we are told that the law refers not only to the minimum which is requisite for the support

of man's physical existence, and is almost as unchangeable as his physical constitution, but also to the minimum which is necessary for the satisfaction of the complex wants of man living in a civilized environment, a minimum which varies according to the particular degree of civilization. In this broader sense, the theory becomes far more probable; but at the same time it grows far less appalling; indeed, it appears to be almost too reassuring. Does the theory merely mean that the workman's wages are regulated by the habits and standard of life of the laboring classes, by the whole body of physical and social, natural and artificial wants which characterize the environment in which he has to live? Is it further granted that instead of being "brazen," this minimum is elastic, mobile, and variable according to the race, the climate, and to the age, and that it ceaselessly and inevitably tends to rise in proportion to the increase in number and kind of the wants, the desires, and the requirements of civilized man? If so, we will not gainsay the theory; and with all our hearts we hope that it is a true one, for in that case it should be called not the Law of Brass, but the Golden Law of wages. But the hope is too great a one.

If we ask the disciples of Lassalle why the wages of French day-laborers in rural districts, which formerly only allowed them to eat black bread and wear wooden clogs, have not now risen so as to enable them to take to white bread and use shoes as foot-gear, we are told, "It is the new wants and the new habits which have caused the rise in wages." So be it; but if they take to eating meat with their bread and to wearing flannel shirts under their waistcoats, are we to assume that their wages will rise so as to enable them to satisfy *these* new wants? If so, what a happy prospect they have! Henceforth the workman's fare need not be adjusted to his wages; his wages will be fixed according to what he eats and how he lives. Under this rosy light the Law of Brass has been set forth in *Wealth and Progress*, a book by Mr. Gunton, an American.

As we have previously rejected the doctrine which bases the value of things upon their cost of production, we should be inconsistent in admitting its application to the case of manual labor.

Section 2. The Theory of the Productivity of Labor.

The optimistic school upholds the reverse principle that wages are regulated by the productivity of the workman's labor.

The theory is quite a recent one. It was first set forth by General Francis Walker, the American economist, in his book on *The Wages Question*, and was adopted by Stanley Jevons. It also obtained the support of three of the author's colleagues, MM. Beauregard, Chevallier, and Villey, in three works on wages, which they simultaneously published, and all of which were crowned by the Institute of France.

The workman is never tired of demanding "the whole of the product of his labor," the phrase which forms part of the platform of the labor party. Such a claim would only be justified if the laborer himself had supplied all the elements of production, not manual labor alone, but also the raw material and the implements which the autonomous producer does provide. Under the wages system these conditions are not fulfilled. Once at a public meeting a workman shouted out the vulgar but vivid phrase, "The man who makes the soup should eat it!" Quite correct; but is it the workman who has made the soup? No! it is the employer who has provided the kettle, *i.e.* the instrument; and the ox which gives the beef, *i.e.* the raw material; and none but he sets the pot boiling. Thus the workman's claim to have all the soup for himself, to obtain the whole of the produce of his labor, is utterly unreasonable under present economic conditions.

The present theory, however, does not assert that wages will be equal to the entire value produced by the workman's labor; for in that case the employer would gain nothing, would doubtless lose, and would therefore abstain from business. It merely holds that the workman receives in the form of wages *all that remains* of the entire product after a deduction has been made of all the shares which are due to the other collaborators, *e.g.* after a deduction of the interest on the capital which he does not supply, and of the insurance premium against the risks which he does not bear.

According to this theory, the value of labor cannot be likened to the value of a commodity, which is subjected solely to the law of supply and demand as regulated by competition. It is granted that the laborer is an instrument of production, but it is added that the value of an instrument of production depends on its productivity. When a capitalist hires a piece of land, is not the rent which he has to pay calculated according to the productivity of the land? When he hires labor, then, why should not the rate of wages be in proportion to the production of that labor?

If this theory is a sound one, it should be as encouraging as the Brazen Law is discouraging. For if the rate of wages depends on the productivity of the workman's wages, his destiny can be carved by his own hands. The more he produces, the more he will gain; his wages will infallibly be increased by everything that tends to increase and improve his productive activity; viz. physical development, moral virtues, technical education, inventions, and machinery.

In fine, the results of the contract of wages would be even more advantageous than those of actual partnership or profit-sharing, for the workman, and *none but he*, would profit by the entire increase of the productivity of labor; he would literally receive the whole of the produce of his labor, after the natural subtraction of interest on the capital which he does not supply, and of the insurance premium against the risks for which he is not liable. This harmonizes with Stanley Jevons's statement, that the laborer's wages always ultimately coincide with the product of his labor, after a deduction has been made of rent, taxes, and interest.

The bare enumeration of these consequences shows us in what measure the theory is in opposition to actual facts. We have already granted that the productivity of labor influences the rate of wages; for by increasing the general wealth of a country it swells the whole mass which is to be divided, and thus comes to augment the respective portion due to each of the sharers, in whom workmen are included. It further affects the rate of wages; for as soon as labor is more productive, the demand for it should

increase. But one of the most essential elements is left out of account, — the abundance or scarcity of manual labor, the effect of which is usually the most powerful of all. It is not probable that the productivity of labor in the United States is smaller now than it was twenty years ago; but in that country the rate of wages has perceptibly fallen, for the proletariat class has been largely added to, both by the immigration of foreign laborers and by the appropriation of the available land.

Section 3. The Theory of the Wages-Fund.

For many years this was the classical theory, especially in the opinion of English economists; but it is now beginning to be abandoned. Like the Brazen Law, it starts from the principle that the price of manual labor, that is to say, wages, is determined by the law of supply and demand, and these two factors it defines in the following terms. The supply is furnished by the workmen, the poorer classes, who seek for work whereby to earn their living, and offer the use of their arms for that purpose. The demand is composed of capitalists who need investments; for the only mode of employing capital productively is to devote it to the supplying of work to workmen. The ratio between these two elements will determine the rate of wages.

In Cobden's picturesque and often quoted formula the law means that "whenever two workmen run after one master, wages fall; whenever two masters run after one workman, wages rise." When couched in these terms the theory may be regarded as irrefutable, and virtually differs little from our own account of the matter.

But the theory has been damaged by an attempt to ascribe to it an exactness which it does not possess, and to convert the law of wages into an arithmetical process.

Take the circulating capital of a country, or the wages-fund, as the English term it, because they hold that its purpose is to support the laborers during the course of their labor. Then take the number of laborers. Divide the first figure by the second, and

the quotient will instantly give the sum total of wages. Let £400,000,000 be the circulating capital, and 10,000,000 be the number of the laborers, say in France, and the yearly average wages will be £40.

This theory clearly demands that wages can vary only as one of the two factors varies. Therefore a rise in wages is possible only in the two following cases: —

Firstly. If the *wages-fund* — *i.e.* the mass to be distributed, the dividend — happens to increase, and nothing but saving can increase it.

Secondly. If the laboring population, *i.e.* the divisor, diminishes. Now it can only diminish in proportion as the workmen apply the principles of Malthus, and either abstain from marriage or have few children. The conclusion drawn by John Stuart Mill, the ablest exponent of the doctrine of the wages-fund, was that the only safeguard for wages-earners was a restriction of the increase in population.

In this shape the theory is hardly more encouraging for the working classes than was the Law of Brass, and it practically amounts to the same result. In its opinion, the divisor (the number of the working classes) must increase far more rapidly than the dividend (the amount of capital available); whence it follows that the quotient (wages) must tend to diminish, till it has fallen to the minimum, beneath which it cannot descend. The reason for this is, that the production of children is a far easier matter than the production of capital. The latter presupposes abstinence; the former implies the reverse. Population is multiplied spontaneously; capital is not.

This doctrine of the wages-fund is bound up with a conception of capital, with which we have previously disagreed. Every human society is supposed to possess a species of provision store, from which we can draw at will for the support of the laborers; hence it is inferred that wages can be paid only out of the produce of *past* labor, and never out of the produce of *future* labor. As a matter of fact, what labor produces daily is enough to support labor.

We must also note that the professed exactness of the theory is altogether deceptive. In this arithmetical sum which we are asked to solve, the three terms of the problem are three unknowns; in the division we have to perform, the dividend, as well as the divisor, is represented by x. How, then, can we find the quotient?

The following is the real statement of the case: the dividend is not the amount of capital in the country, which could be calculated, if need be; but it is merely that portion of their capital which employers wish to spend in manual labor. The divisor is not represented by the total population of the country; it is composed of those laborers who have to hire out the use of their arms, and from these we have to deduct all autonomous producers, who may be very numerous. Thus, on a nearer view, the theory is resolved into this: the rate of wages can be obtained by dividing the whole sum distributed in wages by the number of those who receive wages. There was no necessity to prove that.

III. The Rise in Wages.

The gradual rise in wages, especially for the last half-century, is an indisputable fact. Millions of statistical observations, which have been collected in all European countries, justify the conclusion that in this space of time agricultural wages have about doubled, and that wages paid in manufactures have increased by two-thirds, or thereabouts.

For this conclusion to have any real value it should be corroborated by a mass of figures, inasmuch as nothing is proved by a few separate figures, which may have been arbitrarily chosen The requisite tables cannot be given here, but in *La Main-d'œuvre et son prix*, a book from the pen of M. Beauregard, Professor in the Faculty of Law of the University of Paris, they may be found, together with a mass of substantiating evidence. A general view of the subject will be obtained from the table prepared by M. de Foville, which we here subjoin. The income of a family of French

agricultural laborers for a century past is thus set forth by M. de Foville : —

1788	£8	1852	£22
1813	16	1862	28 16*s.*
1840	20	1872	32

The rise has been much greater in the rural districts than in the towns, and in the provinces than in the capital ; this is explained by the constant emigration from the country into the towns, and from the provinces to the capital.

Now, what are we to infer from this rise? According to the optimistic school, the improvement in the condition of the working classes is certain, considerable, and indefinite ; further, it is spontaneously effected, and therefore, in the interests of the workmen themselves, the only policy is one of *laisser faire*.

This view of the matter is not shared by the socialists, their leading principle being that under the present economic organization the rich always become richer, and the poor never cease to grow poorer. They cannot deny the material fact of the rise in wages, for it is incapable of denial ; but they assert that it proves nothing as regards the improvement of the lot of the working classes, and rest their case on the following reasons :

Firstly. The rise in wages is *nominal*, and not actual ; it is merely an optical illusion occasioned by the depreciation of the value of money. If, during the last half century, money has lost half its value, how does the laborer gain by receiving as his wages a florin instead of a shilling? He is no better off for that.

There is some truth in this assertion. It is a fact that money has lost a portion of its value, especially since the discovery of the Australian and Californian gold-fields, in the year 1850 and thereabouts ; this fall in value of the monetary standard has caused a general rise in prices, and consequently an income of £80 at the present day does not give double the ease and comfort which £40 yielded in 1850. We must now see whether this depreciation of the value of the money, or, what is the same thing, the general rise in prices, has been equal to the general rise in wages.

Now it is perfectly certain that prices have not doubled; their average increase has not even been two-thirds; the depreciation of money is usually calculated to be a third at the very outside. Therefore the workman who now receives £80, or only £67, instead of the £40 he was paid forty years ago, enjoys an income which is not only larger in terms of money, but is also a more powerful instrument of purchase and of consumption. The rise in wages, though partly nominal, is also partly real.

For a more accurate estimate of the improvement in general welfare that this increase in wages represents, we ought to analyze the workman's expenses, and examine what rise in price has been sustained by each of the principal articles in his budget. More than once already this task has been carefully performed, and the result shows a clear rise. Food, such as meat, vegetables, wine, butter, and so forth, has largely increased in price, indeed, has more than doubled; house rent has grown in even higher proportions; and these two are very important items. But bread, which is the principal article in the budget, is not perceptibly dearer; manufactured goods, such as clothes, are considerably cheaper; and there is a further decrease under the headings of transport, intercommunication, and education.

Secondly. The socialists add: Even admitting that the rise in wages is partly real, in any case it *is not in proportion to the development of the general wealth*, and to the increase of the incomes of the other classes of society. Let us suppose that fifty years ago the whole sum to be divided between the propertied classes and the proletariat was £400,000,000 sterling, or £200,000,000 for each. Yet the total, now, has risen to £800,000,000, — the proletariat receiving £280,000,000, and the monied classes, £520,000,000. Then the rise in wages, though real, would not mean an actual rise in condition; for though the wages-earners' share would have increased by 40 per cent, the share of the other classes would have risen 160 per cent, or four times more. The wages-earners would be better off, but they would not *feel* richer; for it must not be forgotten that wealth is purely relative, and such is man's

nature that comfort itself is regarded as misery, if it is contrasted with the opulence of one's neighbors.

This argument against the present social order is perhaps one of the strongest that the socialists keep in their armory; for, from the standpoint of social justice, the workers have a right not only to some improvement of their condition, but also to an increase of income at least equal to that gained by the other classes of society. As a matter of fact, this equal increase has not been made. If we look at the official list of the property transmitted in France by inheritance or donation, we find that the figures which were 2,509,000,000 francs in 1835, and 3,133,000,000 francs in 1856, rose, in 1885, to 6,429,000,000, though in 1888 there was a slight fall to 6,330,000,000. As the yearly income was clearly in proportion to the entire sum, we may lay down that the total of all private fortunes has been more than trebled in fifty years, and more than doubled in thirty years. This increase is certainly far higher than the increase of wages; for that, to take the most optimistic calculations, does not exceed 66 or 100 per cent.

IV. Whether there are any Means of improving the Condition of the Wages-Earners.

There are three ways by which an attempt can be made to improve the condition of the wages-earners, and each of them has been extolled by its particular school.

There is the *strike*, or the conflict between workmen and employers.

There is the *law*, or State interference.

There is *co-operation*, either between the master and his men, or between the workmen themselves.

Before we examine these modes, we should ask whether their efficacy can be depended on.

The more rigid members of the Liberal school disbelieve in the efficacy of any of them. As in their opinion the rate of wages is determined by natural laws, it cannot be influenced by any

artificial cause. To hold that wages can be made to rise by a combination of workmen, by a chapter of law, or by any form of association, is as absurd as to believe that fine weather can be caused by pushing forward the needle of the barometer with one's finger. If wages ever rise after a strike, that is because they were bound to rise in any case. The strike has only been the light tap on the glass of the barometer that stirs the always sluggish needle to follow the movement of the mercury, and to assume more quickly its position of equilibrium. In fact, if the rate of wages is to rise at all, it will do so spontaneously; if it has no inclination to rise, it cannot be forced up. In all normal societies the tendency is to rise. All that can be done is to aid this evolution by giving freer play to the forces which have acted hitherto; viz. competition and freedom of contract. This might be effected by the formation of the Labor Exchanges proposed by M. de Molinari, in which the supply of and demand for manual labor from all parts might be brought into touch, and from which labor might obtain a mobility equal to that possessed by capital.

This tranquil mode of philosophizing has discredited the Liberal school more than anything else has, and it is justified neither by observation of facts nor by scientific reasoning.

In reality, it is beyond question that the workman's condition has been greatly improved by strikes, or fears of strikes, or the formation of powerful bodies tending towards that end: this is decisively proved by the history of the laboring classes in England for the last fifty years. Further, it is beyond dispute that State interference has brought about the same result in all countries, in Germany in particular. Although profit-sharing and co-operation have not yet borne much fruit, still the progress made allows us to count on their efficacy.

As far as theory goes, we freely acknowledge that the rate of wages is determined by natural laws, — in a word, by the law of supply and demand; but that does not negative its possible modification by the will of man as excited by combination, co-operation, or State interference. To return to the figure used above,

it would be ridiculous to profess to alter the movements of the barometer by pushing the needle with the finger; but it is perfectly legitimate and scientific to assert that it can be altered by a modification of its atmospheric surroundings, say by carrying it up a mountain or by putting it under the influence of a pneumatic engine. Similarly we can lawfully attempt to modify the condition of wages-earners by effecting changes in their economic environment, and by acting on the causes which sometimes depress and sometimes elevate the rate of wages.

Besides, even if the price of manual labor is, like the price of every other article, determined by the law of supply and demand, that does not prove that this state of things is normal; on the contrary, it is abnormal, — we might even say, against nature. It is not natural that human labor, which is the agent in all production, should be merely a commodity which is quoted on the market and is subject to the same variations in price as are experienced by cottons and by coals. There is a reaction against this state of things, — a reaction in which the workmen are supported by public opinion and by law. They now claim to be treated not as *things*, but as men; they demand not the price which the state of the market assigns for a bale, but the share which justice apportions to a collaborator or joint worker in the labors carried on by society as a whole. They therefore ask the other sharers to draw a little closer together and give them room. This idea that the wages-system should be a partnership — even though its outward forms should remain as they are — cannot but profoundly influence the nature of the contract of wages, and, consequently, the rate of wages.

No doubt this rise in wages cannot be boundless, and its limits will be somewhat narrow, if we are to suppose that the production of wealth remains the same as it now is. We may simply in passing throw out the suggestion that perhaps a general rise of wages would enable the workman to make progress on all lines, and that consequently the productivity of labor, and therefore the amount to be shared, might both be increased.

If the whole amount to be divided is not augmented, a rise in wages can only be brought about by a reduction of profits; if, then, we consider how greatly profits are diminished by competition, and agree that the employer must be allowed to retain enough to recompense him for his risks, remunerate him for his labor, and pay the interest on his capital, we shall have to confess that the margin is somewhat narrow.

Certainly, wages can rise without involving any diminution in profits, if only the price of the products is raised in proportion. That is what manufacturers naturally strive to do, for then the public has to pay for the increase in wages which they have been obliged to grant. But this rise in prices is borne by the consumer, and ultimately, perhaps, by the wages-earners, who form the bulk of consumers.

V. Strikes.

To strike is for men to concert together and refuse to continue work; a strike, therefore, presupposes a prior understanding, *i.e.* combination. This right of combination has been only very recently recognized in various countries; in France by the law of 1864. In right, its legitimacy should be beyond dispute; for if we grant that labor is a commodity like any other article, every man should be free to refuse to surrender his commodity except on the conditions which satisfy him.

Strikes are a mode of warfare, and therefore share the disadvantages of war. They entail an enormous waste of productive force; — the statistical department of the United States' Labor Bureau calculates that the losses caused by strikes and lockouts during the six years, 1881–1886, amounted to $98,000,000; — they cause great sufferings, and leave to rankle in the hearts of the vanquished (be they workmen or employers) resentment which prepares the way for future conflicts. But it cannot be denied that this violent method has helped to bring up the rate of wages by compelling masters to give their men a larger share.

The efficacy of strikes must not be gauged from the statistics of those which have succeeded or have failed. One successful strike may raise wages in a host of industries; and moreover, the ever-present fear of a strike does more to raise the rate of wages than even an actual strike. We must observe that the success of a strike, just as the favorable issue of a war, demands previous preparation by a powerful organization. An accidental and temporary combination is not enough. Permanent and strong associations are needed, so that their method of action may be the threat of a strike, rather than a definite strike. The more powerful these bodies are, and the easier their formation, the fewer strikes there will be; just as war in Europe is largely prevented by the great armies kept up by every State. Thus the English Trade-Unions (which correspond to the *chambres syndicales d'ouvriers* in France) have become a power in the country, and have greatly improved the condition of the working classes.

The trade-unions are very wealthy and have many thousand members (the numbers of the Amalgamated Society of Working Engineers rising to 60,000);[1] they are directed by prudent and distinguished men, some of whom have been returned to the House of Commons, and their great Annual Congresses excite much interest. Up to the present, their influence has not been diverted into socialistic directions, but has been devoted to the more practical aim of an increase in wages or a diminution of the length of the working day. However, their methods have not always been of the most intelligent kind. They have shown moderation in their use of the formidable weapon, strikes; but, being full of the idea that the price of manual labor depends solely on its scarcity, and failing to take into account the question of its productivity, they have striven to restrict the supply of manual labor in every possible way, by limiting the number of apprentices, by forbidding piece-work, and by discountenancing natural ways of developing the workman's power of labor. By thus closing

[1] In 1890, the number was 65,210. See official Report of Twenty-third Annual Trades-Union Congress (published at Manchester, 1890). — J. B.

their ranks they have turned their members into a sort of aristocracy of labor; but this has alienated from them the working masses whose occupations require no period of apprenticeship, in fact, the class of unskilled laborers.[1] The latter, therefore, have become more and more accessible to socialistic teaching, in proportion to the growing conservatism of the Trade-Unions. (See Professor Brentano's article on the working classes in England in the *Revue d'Economie politique* for July–August, 1890.)

The United States also possesses trade-unions, but besides these there is the well-known organization of the Knights of Labor, which admits all unskilled laborers.

In France the *chambres syndicales d'ouvriers* (workmen's unions) are far less well organized, and most of them are composed of a very minute portion of the respective trades. Unfortunately, they make up for this paucity of numbers by a strong tendency to violence; and, the organization being weak, the working classes do not derive much benefit therefrom. Their masters generally refuse to deal with these bodies, and prevent their men from joining them. This is a mistaken action; for, were these unions to embrace all the laboring classes, their aims would become far more practical. Still we cannot agree with the measure lately passed by the French Chamber of Deputies, which would oblige employers, whether they will or no, to keep workmen who have joined these unions.

The efficacy of these fighting bodies arises from the fact that the workman who joins them holds a much stronger position as regards his employer. Under ordinary conditions, when a workman treats *single-handed* with an employer, the following reasons practically compel him to accept the price offered him: —

Firstly. The capitalist can wait; but the workman cannot, for he is in the position of a trader who is absolutely obliged to sell

[1] It is difficult to maintain this in face of the fact that the list of trades' societies represented at the Congress in 1890 included the three unions of Dock-laborers, together numbering more than 160,000 members. — J. B.

his goods in order to get a livelihood. In this case the commodity is manual labor.

Secondly. The employer can usually do without a particular isolated workman; but the converse is not equally true. Another workman can always be found; he can be brought from another district, or from abroad, if need be; nay, machinery can be introduced in his stead. A fresh master cannot be found with the same ease; he cannot be imported by rail or by steamer; nor can a machine be put to do his work.

Thirdly. The employer is better acquainted with the state of the market. He looks further ahead, and from a commanding position.

But, as soon as our workman has joined together with his fellows in the same trade and has formed a union, the positions are equalized.

Firstly. The workman is enabled to refuse to give his labor, and can be supported meantime by the funds of the society and the contributions of the members.

Secondly. All the men in one factory become banded together, and the master has to deal with all, instead of with only one.

Thirdly. The union starts intelligence-offices, and obtains competent and experienced managers, who are as well acquainted with the current state of affairs as the masters themselves. Hence, the society is prevented from making false moves.

VI. State Interference.

State interference for the improvement of the condition of the working classes can be carried on in many different ways.

SECTION 1. The most radical measure — the demand of the militant labor party — is to fix a *minimum wage*. In our opinion the proposal is somewhat absurd. It is not enough for workmen to be guaranteed this minimum wage; they must also be assured of finding masters who will employ them at that price. Now, no power under heaven can force a capitalist to employ laborers if

he does not derive sufficient profit therefrom. In spite of the repeated demands of the labor party, this experiment of fixing a minimum wage has not yet been made; but history shows us that law has several times exercised its authority and fixed a maximum wage. Still more frequently the State has interfered and fixed a maximum price for some commodity or other (a bread-tax still exists in certain places). But the lack of success of these various legislative measures enables us to conclude *a fortiori* that the legislator is powerless to fix the price of manual labor.

SECTION 2. There is a large collection of legislative proposals which do not touch the wages-system itself, and do not even profess to change the rate of wages. The end in view is to improve the condition of the wages-earners, either by duly limiting the duration of their labor, or by guarding them against the grievous eventualities which may proceed from their position. These measures are now being brought to the fore in all the parliaments of Europe, under the name of labor legislation. The limits of this book must restrict us to an enumeration of them.

Five risks hang over the head of the wages-earner; three of them he shares with the rest of mankind: namely, *illness*, *old age*, and *death*; but two arise out of his peculiar circumstances, — *liability to accidents* and *enforced loss of work*. By all these he is rendered incapable (either permanently or temporarily) of working, and consequently of earning daily bread for himself and family. Through any of these risks the man of the proletariat, or those he leaves behind him, may be thrown into the ranks of pauperism, or even of crime. Setting aside, then, all considerations of justice, it is a social interest of the highest importance to guard against or mitigate the consequences of these risks. Now is individual initiative, when taking the shape of saving and of association, capable of meeting these dangers, or must we fall back on State interference? To our mind saving, and especially the poor man's saving, is not enough.

Still, the risk of illness can be sufficiently provided for by the formation of *benefit societies*. With the aid of a very small sub-

scription, which does not usually amount to more than a shilling a month, these institutions are able to meet the expenses of doctors and dispensers and to grant a certain allowance for each day of sickness. There are large numbers of these benefit societies in all countries, particularly in France, and they are generally favored by law with certain privileges, which cannot be dealt with now.

The premium of insurance against accidents is not much higher, but the workman would scarcely be inclined to pay it, even if he had the necessary funds; for not very many even of the cultured classes are prudent enough to insure their limbs or lives against accidents.

Insurance against old age, that is to say, the accumulation of sufficient capital to yield an annuity after the age of sixty or seventy-five, entails sacrifices which a laboring man's means are totally unable to support. The same may be said of the two other dangers, death and enforced idleness.

It might be legitimately urged that some of these risks, especially injuries through accidents and old age, ought to be provided for by the master. As a matter of fact, some employers, especially large limited liability companies, have voluntarily organized compensation funds against accident, and superannuation funds for the aged. They bear the whole or most of the expenses of these, and the workmen have only to pay a small share, which is withheld from their wages.

But this generous private action of certain masters has not found many imitators, either through want of sympathy or through lack of means, for the successful working of such institutions requires a large staff and a considerable amount of capital.

According to the French law, the employer is only strictly liable for accidents which the workman has proved to be the former's fault; this obligation of proof has made the workman's right practically invalid. But present public opinion now holds that the position should be reversed, and that the employer should always be held liable unless the accident is proved to have arisen

from the carelessness or recklessness of the workman. It will be seen that the German laws, presently to be spoken of, go so far as always to put the risk upon the master, who is regarded to be as much liable for any deterioration of his staff as he is for deterioration of his plant, both of these entering into the general expenses of manufacture. This is called the theory of "professional risk." The object of such a proviso is to put a stop to the numerous law cases in which one side tries to throw the blame on the other side. Similarly, with a view to avoid all controversy as to compensation that has been fixed, once for all, as two-thirds of the wages. Were the French law equally severe on this point, employers would speedily band together in insurance societies for the purpose of guarding against the expenses of such liabilities. That might be the best solution.

The insufficiency of, or disinclination to, private action as to these questions has made men ask whether the State is not bound to interfere to guarantee the laboring classes against these risks, even as a measure of good administration; for the smallest of these risks can plunge the working man into misery, and the class composed of the wretchedly poor is at one and the same time a danger and an expense to society.

These considerations have induced the German government to promulgate a body of laws[1] which, in spite of the conflicting opinions as to their virtue, are the legislative event of late years. We have already referred to a portion of the scheme. The whole is a gigantic system of insurance against sickness, accidents, and old age, which is to procure the compulsory entrance of all masters and men, both in manufacture and in agriculture, into huge industrial and district corporations. The expenses of insurance against accidents are to be borne entirely by employers; insurance against illness falls one-third to the masters and two-thirds to the men;

[1] The Act of 1883 established compulsory insurance against sickness, of 1884 against accident, and of 1889 compulsory provision for old age. See *e.g.* Professor Taussig's graphic sketch of all three in the *Forum* for October, 1889. — J. B.

insurance against old age and infirmities incapacitating from work is to be divided equally between employer and employed. Whenever the expenses are very large, the State comes to the aid of both parties, and promises to grant £2 10*s*. (50 marks) a year to each superannuated person. It is still too early to judge of the value and useful results of this huge mechanism. In spite of its extraordinary complication, it will remain as a legislative monument of our era, and as the boldest experiment of State socialism which has yet been tried.

In France there has been since 1850 a State-established National Superannuation and Insurance Office, which gives workmen rather better terms than are granted by ordinary insurance companies; but it has not been much used. Latterly various bills have been proposed, to form superannuation funds for the aged, after the German system.

But association and insurance are not capable of exorcising that lack of work which present-day economic evolution brings upon us again and again with almost fatal periodicity. Unlike the other risks we have enumerated, this danger does not attack mere individuals; it assails in large bodies all the men in one factory, all the workers in one trade, sometimes, too, all the industries in a country! No doubt the workingman can subsist for a brief space by eating up his small savings, if he has made any, or by pledging at the *Mont-de-Piété* the few movable goods he may possess; but these are scanty resources. We may note that the French *Monts-de-Piété* are in a way the equivalent of the pawn-shop, as they lend money on pledged articles. Though they are philanthropic institutions which are not worked for a profit, they are obliged by the very onerous nature of their business to lend at a very high rate of interest.

Now, can the State do aught to guarantee the workman against the risk of losing all employment? This was once believed to be possible, and the government was urged to aid all men out of work by guaranteeing them the *Right to Labor*. This claim made a great stir during the French Revolution of 1848; and to meet this

demand were formed those "National Workshops" in the Champ-de-Mars which provoked the sanguinary insurrection of the Days of June. This right is now somewhat out of fashion. It is certain that the State has not the power to assure to each man a special kind of work, — the work which suits him best, and least of all a productive form of labor, — unless, indeed, it turns itself into the universal employer in all industries, — in other words, steps boldly upon the path of collectivism. Indeed, men have scarcely yet come to recognize that the right to labor is anything more than a form of public relief. We shall return to this subject.

SECTION 3. The State can attempt to improve the condition of the wage-earning classes, not by interfering with wages, but by reducing the duration of labor. This question has of late years given rise to quite a separate economic literature of its own.

The Liberal school only admits limitation of labor as far as regards children, for they are minors and are unable to assert and defend their own rights themselves. There is no disagreement on this point; and the laws of all countries in Europe, save for a few scandalous exceptions, prohibit children from working in factories till they have reached a certain age; but the limit of age varies. In France, at present, it is twelve years, which is too low; but a bill, which has not yet passed, will probably raise it to thirteen.

The application of this restriction to men, and even to women, the Liberal school refuses to grant. In its opinion, men and women alike are the best judges of the use they ought to make of their time, and it would be a great disservice to prevent them working when they please, since their labor constitutes their livelihood. Society, too, would be injured; for to limit labor would diminish the production of wealth.

All the other schools, not only the socialists, properly so-called, but also the socialists of the Chair and the Catholic school, hold that the legislator has the right, and ought, to interfere, even in the case of men. The line of argument is that freedom of contract as applied to wages is nominal and not real. A workman labors

twelve hours a day, not because he wants to do so, but because he cannot help himself. Further, a limitation of the hours of labor would not diminish the production of wealth, and, even if generally adopted, would not reduce wages. Nay, if it did lower wages, it would be better for workingmen to have smaller incomes and less deadening work.

This assertion that wages would not be reduced may sound paradoxical, but it is the logical consequence of all the great theories we have examined. Socialists who hold that the rate of wages is always determined by the cost of maintenance of the laboring-man and his family, have no difficulty in showing that the number of hours he works cannot influence the rate of wages in the least. Nor can those who base wages on the law of supply and demand think that the limitation of the hours of labor can lower the rate of wages, for its effect would be to make manual labor scarce. With the length of the working-day reduced by a tenth, eleven men would have to be employed in the place of ten. Again, those who believe that the productivity of labor is the sole regulator of the rate of wages, can still think that to reduce the hours of labor will not reduce wages, for experience shows that a man works far better when he is not overworked, and that the greater intensity of the labor amply compensates for the shorter time spent over it. This is shown in England and the United States, where the working-day is the shortest and labor is the most productive.

However, it must be admitted that the economic solidarity of the present day, or rather the keen competition between nation and nation, would make it difficult for any one country to limit the length of its working-day without falling into a position of dangerous inferiority. For this reason a general agreement between all civilized countries has appeared to be desirable, but the problem would thereby become international and none the more easy to solve. In April, 1890, an international conference on the matter was held at Berlin, and in this all the European countries took part. A number of resolutions were formulated; but until

further steps are taken these will remain in the state of abstract resolutions.

For the restriction of the hours of work for women, the arguments are very strong indeed. Female labor in the workshop practically destroys the home; it causes mothers to neglect their children, and often drives the girls and younger women upon the streets. This compulsory neglect of children, if of early years, necessarily involves artificial rearing, and, with that, an appalling mortality of infants, — more than sixty per cent of those in their first year. The welfare of the community is therefore at stake. To remedy this frightful blot, *crèches* (or common nurseries) have been established; these are private institutions which take in children whose mothers have to leave them, and tend them on hygienic principles.

Several countries have begun to restrict the hours of labor. In Switzerland and in Austria the working-day for men has of late been fixed at eleven hours. In France there is an unrepealed law dating from 1848 which assigns twelve hours as the limit; but this measure is a dead letter. Though women are not prohibited to labor and the hours are not limited, still the laws usually forbid them to work at night-time, in mines, or for a reasonable period before and after childbirth. Till lately, the restriction as to work in mines was the only one which obtained in France; but a recent measure aims at further restrictions.

VII. Co-operation.

The third mode of improving the condition of the wages-earning classes is association, — either the partnership between the employer and his workmen which is called *profit-sharing*, or partnership of workmen among themselves in the form of *producers' co-operative societies*.

Up to the present moment this has been the least fruitful in results of the three methods we have indicated above; but none the less it is the one in which we ought to put most trust. It

is as superior to the method of strikes as peace is to war; it is better than State interference in the same way as liberty is better than coercion.

Section 1. Profit-Sharing.

This, as we have said, tends to modify the wages-system by putting in its stead association between employer and employed. Association we have already recognized to be, theoretically, the most perfect form of productive enterprise, and the removal of the practical difficulties which we have also granted is the aim of profit-sharing.

This method is thoroughly French in origin. It was first practised in 1842 by a house-painter named Leclaire. The measure of success he obtained has never been equalled since then; but it can be explained by the special conditions of the founder's calling. The plan is now employed in at least 250 business houses; and nearly all these experiments have turned to the advantage of the masters as well as of the men.[1]

However, in most of these cases the profit-sharing has not been an actual partnership; the differences lie in the following features: The workmen are always liable to be discharged by the employer; in no wise do they take part in the management; they do not bear any of the losses; finally, they are paid in ordinary wages, and the share they receive from the profits is treated merely as a supplement, a "condiment" (or relish in the food), as M. Leroy-Beaulieu calls it; indeed, in some cases it is only a gratuity or present, which the employer fixes as he wills. Further, the amounts which the workmen receive from this system may be apportioned in different ways. They may be calculated according to the profits

[1] A British Government return, drawn up by Mr. J. L. Whittle of the Patent Office and published in March, 1891, gives figures and facts about the leading cases of profit-sharing in Europe and the United States. The details given of the system of Laroche Joubert's Paper Manufactory are especially valuable. (Report to Board of Trade on Profit-Sharing, 1891, C. 6267.) — J. B.

realized, or to the quantity of the goods produced, or even to the savings effected in the use of the raw material. Thus, some railway companies give bonuses to their engine-drivers in proportion to the amount of coal they have succeeded in saving.

It is probable that as this system develops, it will come more and more to coincide with a real partnership. Such as it is, it has already rendered very great services. 1. It interests the workman in the success of the business, and therefore incites him to exert all the energy of which he is capable. 2. It unites the workman's interests with the employer's, and thus prevents disputes and strikes. 3. It keeps the workman in the same factory year after year, and tends to guarantee permanent employment. 4. It encourages thrift by splitting up the workman's income into two portions, — the weekly wages, which are devoted to current expenses; and the dividend distributed at the end of the year, which makes a surplus that is quite ready for investment. Usually, indeed, the employer makes sure of this saving by withholding part of the dividend at the year's end, and carrying it forward to the workman's account in a special fund, — say a superannuation fund.

The attitude which the classical school holds with regard to profit-sharing is one of ironical interest rather than of pronounced hostility. The following are the principal criticisms it passes: 1. Workmen have no right to profits, for in every business it is the employer, and not his men, who really makes them; they are the 2. result, not of the actual process of manufacture, but of the sale of the products, and with this workmen have nothing whatever to do. — We need only rejoin that capitalists have even less to do with the creation of profits than workmen are supposed to have, and yet their participation in the profits of any business is regarded as perfectly natural, if only they are shareholders. — The second criticism is, that it would be unjust for workmen to share in the profits, since their position *ipso facto* prevents them from bearing the losses. Our answer is, that this difficulty might be turned by the establishment of some insurance fund against risks which

should be partly supported by a deduction made from the men's wages. Further, under the wages-system now in vogue there is injustice in a far different way. Though the workman has no share whatever in the profits, he *does* have to bear the losses; for, if the business does badly, his wages are reduced; and if it stops altogether and the works are closed, he is thrown out of employment and is deprived of all his wages.

Section 2. Producers' Co-operative Societies.

Association for production is a far more radical measure than profit-sharing; the latter retains the employer, the former does away with the wages-system. Workmen, instead of laboring on a master's behalf, band together to produce on their own account and at their own risk and peril; as they are, moreover, the owners of their instruments of production, they naturally keep for themselves the whole of the produce of their labor. This is the position of the autonomous producer whom we have already discussed; but here, instead of there being one solitary laborer, we have a group of laborers forming a unit, a transformation which has been rendered necessary by the requirements of large production.

France is regarded as the classic land of these associations, and seems, indeed, to have taken the initiative in the matter, for the first French society for production dates as far back as 1833. Moreover, at the close of the Revolution of 1848, this movement assumed great vigor, and more than two hundred workmen's associations for production were started in France, many of them being in Paris; but few of these have survived, nor has a more happy fate attended their successors. At the present time the number is about sixty, and in Germany and in England the figures are approximately the same. These producers' co-operative societies have several obstacles to encounter, and these only too fully explain their want of success.

The first and greatest lies in the working class's *lack of economic*

education. Thus laboring men are rarely able to find among themselves men who are of sufficient ability to manage an industrial business. Even if the fitting persons are found, they cannot be chosen to act as managers, for their very superiority too often serves to exclude them. Further, even supposing that the direction of the business is confided to them, it is difficult to guarantee them a share in the produce of the undertaking that is proportionate to the services they render, for the superiority of intellectual work over manual labor is still insufficiently understood. We must hope that this economic education will be gradually acquired by the practice of association in its various forms, especially in producers' societies, but also in consumers' associations.

The second drawback is the *want of capital.* We are aware that, even if the capitalist could be blotted out of the process of production, capital could never be made to disappear likewise; for the system of large production now in vogue demands ever increasing supplies of capital. Now, how can plain workmen obtain these large sums? From the pence that they might put by from their daily earnings? That is possible; it has been done in a few businesses occupied in small industry, but even then at the price of heroic sacrifices. We cannot reckon on any general accumulation of such tiny sums. Shall the workmen obtain the desired capital in the shape of loans from the government? The experiment was made in 1848, but the £120,000 sterling that were then distributed brought little luck to the societies that received them. Nothing is easier to waste than given money, especially when the State is the donor. Yet the socialists appear to favor this plan. Lassalle used to call upon the government to become sleeping partners in producers' co-operative societies and advance some millions sterling to them; thus they would be powerfully organized and would be able to sustain a victorious struggle with businesses carried on by capitalist employers.

However, this difficulty is not insurmountable. Workmen's associations, when once they have been substantially organized and have won their spurs, might easily be able to borrow all the capital

they might require. Have not the German co-operative credit societies been able to obtain their £20,000,000 sterling? Besides, the capital might be procured in a direct way by the prior constitution of consumers' co-operative societies; the profits of the English societies of this kind amount to a score or so of millions sterling.

The third danger is that they tend to *reconstruct the very institutions it was their object to do away with*, namely, the system of employer and wages-earner. So great is the difficulty of modifying any social structure! For whenever these associations have proved successful they have closed their ranks, refused new members, and engaged hired workmen, so that they have become nothing more than companies carried on by small employers.[1] We cannot gainsay the force of this accusation which socialists bring against co-operation. Still, we should attribute to workingmen the possession of a disinterestedness of a rare kind, if we were to expect those who have labored from the beginning and have founded a prosperous business through dint of perseverance and by means of privation, to admit on a footing of equality those who wish to enter at the eleventh hour when the work is done. There is reason to hope that these obstacles may be at least partly smoothed away by a due course of preparation which can be effected in two ways: —

Firstly. By profit-sharing; if the master agrees to abdicate his place, as it were, by organizing the participation in such a manner that the workmen can become his partners during his lifetime, and his successors on his death. To cite the most famous examples, this has been done by M. Godin in the case of the Familistère of Guise, and by Madame Boucicault for the *Bon Marché;*

Secondly. By consumers' co-operative associations; these, when

[1] This was true, for example, of the Rochdale Pioneers. Even now the productive works of the great English Co-operative Wholesale Society (though not those of the Scottish) are carried on by hired labor that has no share in either profits or management. — J. B.

sufficiently developed and interfederated, can start producers' co-operative societies, which they might supply, at one and the same time, with capital, with managers, and with a body of customers, — the very elements, be it noted, which have hitherto been wanting. In England consumers' societies have already adopted these tactics; they have founded some co-operative industries and support others.

Like profit-sharing, co-operative association is not regarded favorably either by economists of the Liberal school, who think that the existing social order is satisfactory and need not be changed, or by the extreme socialists, who hold that The Revolution is inevitable, and that it is therefore useless to play at political economy. Indeed, socialism generally is not greatly enamoured of co-operation, and regards it at the best as a transition measure. Though co-operative production aims at the abolition of the wages-system, it retains private property in capital as its basis, for its object is to make the laborers joint proprietors of their instruments of production. Now, collectivism has in view the "socializing" of all instruments of production; that is to say, their withdrawal from all private appropriation, even from the laborers themselves. Our main objection to the socialistic programme is, that instead of putting an end to the wages-system, it is unconsciously tending to make it universal. For, as soon as society is the sole owner of all instruments used in production, it will be the only employer or master, and all men will be its hired and wage-earning laborers.[1]

In fine, in spite of all adverse criticism, co-operation is the sheet-anchor of those who hold that there is a social question to solve and a social revolution to avoid.

[1] But see our author's own remarks at the beginning of Book IV, Part II, Chap. III, p. 489. — J. B.

CHAPTER IV.

THE MAN WHO LIVES ON HIS INCOME.

I. The Right to be Idle.

In every society there is a certain class of persons who do nothing, but who, none the less, enjoy incomes which, usually speaking, are very large indeed. Does not the existence of this class of do-nothings appear to be in flagrant contradiction to our principle, "each man according to his own labor"? Seeing that they do not work, what right have they to live, and, what is more, to live well? We are certainly entitled slightly to alter a line in the First Eclogue, and to ask these privileged mortals, who is the god who has granted them this ease: *Deus vobis hæc otia fecit?*

The explanation is simple enough. These persons are owners of land, or of a house, or of some form of capital; now, instead of working their land or capital for a profit, on their account, or instead of dwelling in their house, for one reason or another, — perhaps merely for the pleasure of doing nothing, — they let or lend their property to other people in return for a sum, which is payable annually, under the name of interest, land-rent, or house-rent. On this payment they live; as the saying goes, they live on their income.

Must they be debarred from so doing? If so, by what right? Of course, if we reject the principle of private property, the right to lend and the possibility of living on one's income vanish simultaneously. But we have already accepted the principle; and it is, therefore, difficult to see how we can refuse the producer the right to dispose of his article as he pleases, and especially the right to lend it or to let it in return for a fixed payment.

As we are aware, the collectivist school denies this right. It certainly allows the producer to do what he will with the portion of wealth which he has legitimately gained, — to consume it, destroy it, give it away to the person of his choice, — but it forbids him to lend it, just as it prohibits him from making money out of it by means of workmen whom he pays in wages; for in either case he would be living on the products of other people's labor.

It is incontestable that the man of independent means does live on other people's labor; but he cannot be said to live at *other people's expense,* if, by the operation of lending or letting, another man realizes a gain or effects a saving which is more than the interest or house-rent which he has to pay. Now, it is probable that this is the case; for otherwise, why should the borrower, the tenant, or the lodger, strike the bargain?

The rejoinder is, that this argument might serve if the wealth lent by the do-nothing was really the product of his personal labor, and if he could be said to live on the results of his past labor. But that is not so. The landowner, who lives on his farm-rents, has not made the land; the landlord, who lives on his house-rents, has not built the house, but has employed workmen to build it; even the capitalist, who lives on his income, as often as not has not gained his capital himself; he has received it, already made, from those who have left it him as an inheritance. Our only answer can be to refer the reader to our previous explanation, which shows the extension of the rights of property, by a logical evolution, from the products of personal labor both to land, to possessions acquired by inheritance, and to the produce of all collective undertakings. It is legitimate to dispute the extension of the rights of property to these various kinds of wealth; but when once the former have been granted, it would be out of the question to mutilate them by depriving them of one of their essential attributes.

Thus, the existence of an "idle" class is easily explained as far as regards right. Is it more vulnerable when we look to social utility? Yes, cries every socialist; and John Stuart Mill was of

the same opinion. The point is to discover whether this class serves any social purpose.

The unoccupied are not necessarily the drones of the hive. Lack of occupation, or "idleness," may be fertile in result and fulfil a real social function. In its scientific sense, the epithet "idle" does not exactly mean people who do nothing; but designates those persons whose position in life frees them from all anxiety as to their daily bread, and who can therefore turn to any occupation save productive or lucrative labor. In the opinion of the ancients, it was indispensable that citizens should have all their time free for the purpose of joining in public affairs. Even at the present day, the fitting management of certain social interests, the disentangling of the subtle threads of politics and of diplomacy, the holding of the reins of government, the swaying of the sceptre of taste in the realm of arts and letters, require delicate hands which have not been hardened by daily toil, and minds which are not heavily burdened with anxious thoughts as to tasks that have to be completed and livings that have to be gained. Such high functions cannot be executed in odd hours snatched from the labors of the workshop or the counting-house.

Under such conditions, idleness, or leisure from work, is merely a clear instance of division of labor; and, if used in that manner, should by no means be proscribed, but should rather be regarded as the supreme recompense that can crown the aspirations of those who have labored enough and have produced enough. For long to come this privilege will only fall to the lot of a few men, because, as we have often had to observe, our modern societies are too poor to grant many of their number the blissful luxury of leisure. But the ranks of the sharers in this privilege will, we may fairly hope, be constantly reinforced.

Two reservations must be made: We must learn whether those of us who exercise these high social functions strive their hardest to promote social welfare, or whether they endanger the public interests by making no other use of their leisure than the invention of some new mode of squandering wealth. We must

further ascertain whether their share of the general distribution of wealth is really equitable. In France this portion cannot be less than £160,000,000 or £200,000,000 sterling (say £120,000,000 in interest, dividends, or fines for delayed payments; £40,000,000 in land-rent, and £40,000,000 more in house-rent). For the services rendered, this amount is certainly a large one.

We will now study in turn each of the three classes which compose the group of those who live on their incomes.

II. The Rent of Land.

Of the three classes, the landowner who lives on his rent is certainly the most open to attack.

The weak point in his position is easily seen. We have already granted that the institution of landed property is indispensable for the development of agricultural production to the highest degree, and for obtaining from the soil the greatest possible returns.

We have thus been led to consider landowners as invested with a real social function, in fact, as administrators to whom society has intrusted the cultivation of the soil, for which their fixed and final remuneration is to be the sum total of all that they may succeed in producing.

So much we grant; but the landowner scarcely seems to be carrying out his mission, when he neglects his charge of cultivating the soil and converts his land into an instrument of profit and a means of living without working. We cannot easily admit that land has been distributed amongst a few men, like the benefices or glebe-farms in the king's gift, merely that it may yield them a certain income. Thus the reasons which induced us to agree to the rights of property do not appear equally to justify land-rent.

Further, we have seen that the inevitable effect of the laws of landed property and the progressive unearned increment of the soil is to continually raise the amount of farm-rentals. Thus this class of "idle" landlords obtain a constant rise in their income without having to bestir themselves in the least. This was the

origin of the territorial aristocracy of the English noblemen and gentry.

Accidental and temporary causes — for example, the present competition of American land — may arrest this tendency, but do not alter its direction.

Again, agriculture is gravely damaged by the separation of the respective functions of owner and cultivator, which results from the system of leases. No man is able to get from his land all that he possibly can, unless he learns to love it and becomes attached to it. When land is merely let on lease, the landlord does not experience this feeling, for he does not live on this part of his estate, — is even, perhaps, altogether ignorant of it; nor does the farmer cherish this sentiment, for he is only a bird of passage and feels that he is a stranger. Compare with this Michelet's description of the peasant proprietor: "When thirty paces away, he stops, turns back, and casts upon his land a last look which is at once profound and sombre; but for the keen-eyed observer that look is full of passion, love, and devotion." Land will never be looked on with such an eye of love, either by the farmer who occupies it, or by the owner who has let it as farm-land.

On the other hand, M. Leroy-Beaulieu holds that a division of functions is formed between owner and farmer, which is very advantageous to a satisfactory organization of production. In the first chapter of his *Essai sur la répartition des richesses* he writes, "The landowner represents the future or perpetual interests of the estate, whereas the farmer only stands for the present but temporary interests." That sentence is very well put; but even if the landowner has that perfect understanding of the part he has to play, still it is possible that present and future interests may clash, and it would be better that the same person should preside over both.

The ordinary farm-tenure does not show nearly so well as the system of *métayer* cultivation, the characteristics of a real partnership between owner and cultivator; especially is this the case when under the method of *métayage* the landlord provides the capital as

well as the land. But the system of *métayage* loses all its merits when the owner is content with levying a yearly share in kind, and demands half the crops. In Algeria he takes as his share four-fifths of the produce.

However, in spite of all arguments for and against, the power of farming out one's land is too intimately bound up with the right of private property for us to dream of abolishing it. When once we have acknowledged the rights of property to be legitimate, it is out of the question to deny the legitimacy of letting land on lease.

Nay, the interests of agriculture might be endangered by a suppression of the method; land, owing to the vagaries of circumstance, may happen to be the property of persons who are totally unable to cultivate it themselves; the reason may be their age, their sex, their profession, their forced absence, or the extent and multiplication of their estates. If such be the case, what better can be done than to let out the land in farms?

To minimize the disadvantages of the system, the lawgiver should turn his attention to two points.

Firstly. He should strive to reduce as far as possible the custom of granting farm leases, and should, instead, favor the cultivation of the land by the owner direct. The French Civil Law contributes to this end by the assistance it gives to small ownership. In France 40 per cent of the cultivable land is held by farm leases, or under the *métayer* system, as against 60 per cent which is cultivated by the landowners themselves. That is a very fair proportion; for in few countries (new lands and colonies excepted) does land held by lease occupy less than half the whole area.

But the French law is far less felicitous when it multiplies the conditions of inalienability on real estate belonging to minors, to women, and to corporations. In such cases the holding of farms by lease is rendered obligatory, for the law hands over the care of landed property to persons who are incapable of working it for a profit themselves. Thus the public interests are harmed

under the pretext of preserving certain private interests. The administrators of such estates (guardians, husbands, and so forth) are forbidden by law to grant really long leases; hence the evil is aggravated.

Secondly. The second point is: wherever farm leases are unavoidable, the law should require that the interests of agriculture should be fostered, either by long leases, or by giving the farmer the right to the surplus value which accrues from his labor.

III. House-Rent.

From a theoretical standpoint the right to house-rent escapes the objections that can be made to the institution of farm-rent, for it cannot be denied that a house is the product of labor. There may be controversy as to the site on which the house is erected, but none as to the building itself.

From a practical point of view, also, this right is seen to rest on a firmer basis. There is no harm in the circumstance that some people build houses, not to live in themselves, but to let; for in that way they render very great service to all those who require a dwelling. It might be more convenient, perhaps, if they did this gratuitously, or even agreed to pay the tenants caretakers' wages, as some socialists facetiously ask; but, as in that case no one would build a house except for his own personal use, those who were not well enough off to own a house would be obliged to do without one and sleep in the open air.

Yet of all persons who live on their income, no one is more cordially detested by the working classes than the "landlord," and no tax is more odious and burdensome to them than that which is expressed by the term which contains a world of sorrow, the "rent."

The reason is, house property, even more than property in land, is becoming a monopoly; all the social, economic, and political causes which urge our population to mass together in the great towns, viz. political centralization, production on a large scale,

the development of the railway system, open-air entertainments, theatres, and music-halls — all these tend constantly to raise house-rent, to the great benefit of the owners of house property in towns, but to the great detriment of the public. Forty years ago the urban population of France was rather less than a quarter of the population of the whole country (24.42 per cent, to be exact); at the present day it is rather more than a third (35 per cent). Thus the population of the towns has increased by nearly 50 per cent in the last forty years even in France, in which country the increase of town-population has been least large.

This is one of the most grievous of all the consequences of the present evolution of economics. House-rent was unknown to the ancients; in their days the house was not only the family hearth, but was also the shrine of the *penates*, the household gods, and each man, rich or poor, had his own dwelling. In our time, however, the exigencies of modern life have caused men to revert to a species of nomadic existence, and prevent them from taking a firm root in their native places. Hence the majority of them have to live in lodgings.

The rich may survive this; their sufferings will not be beyond bearing; but it is quite another matter for the poor. The increase of house-rent, which has compelled the working classes to huddle together in wretched quarters, produces most deplorable effects as regards both health and morality. It is one of the chief causes of most of the vices that afflict the working classes, — relaxation of family ties, frequenting of public houses, and precocious debauchery, — nay, from it may spring some of the scourges of society; for instance, excessive mortality and epidemical diseases.

The only efficacious remedy would be an evolution in precisely the opposite direction, by which the growth of the great towns might be stopped, and the country districts be once more peopled by the inhabitants who have deserted them. We need not abandon all hope of such a change, but at present it shows no signs of being realized. Still, great good may be done by conveyance at cheap rates, as by the omnibus, the tram-car, and railways between

the heart of a town and its suburbs. By these means workmen and business *employés* can obtain more healthy and cheaper dwellings, which may be at some distance from the very centre of the city.

Another remedy, which is the most practical of all, is to build houses which are to be let to workmen, and can finally become their property by payment of a small sum yearly. Various institutions seek to reach this end, but full details cannot be given here. One of the most interesting of all is the association of workmen themselves for the building of these houses. However ridiculous we may think the saying attributed to Joseph Prudhomme, that "people who cannot pay their rent ought to have a house to themselves," the only solution of the problem will be found in giving the workman a domestic hearth and a real home.

These building societies[1] are very numerous in England and the United States; and in Philadelphia they have been so successful that almost every workman has his own house, and the city has received the proud name of the "City of Homes."

Moreover, in England, and also in France, there are many philanthropic undertakings which have been started for the purpose of building workmen's dwellings. The usual practice is to be satisfied with a return of four per cent on the capital, or to devote the whole of the rents received to the building of new houses. A proposal has been made to employ for this purpose the funds of savings banks, which in France are turned to no really beneficial use, and the experiment has been made lately at Marseilles. An investment of this kind would certainly be very safe to make, and would be of much utility.

The socialists demand that these workmen's dwellings should be erected by the State or by municipal bodies. In the opinion of the collectivists, the State or the district authorities should expropriate (with or without compensation) all owners of house property, and should then let the houses, either at a rent equal to the cost of construction, or *gratis*. This is land nationalization applied to house property in towns.

[1] M. Raffalovich gives an account of these Building Societies in his book *Le Logement de l'Ouvrier* (Paris, 1887). — J. B.

To such a proposal our answer must be the following: In the first place, if the State exacts no house-rent, the earliest result will be public ruin; and, further, the overgrowth of our great towns will continue to increase in even more lamentable proportions. It is clear that, if in Paris every one could live rent free, few persons would deny themselves that pleasure. Secondly, if the State does compel its tenants to pay their rent, and punctually too, it might speedily become as unpopular as any landlord under the existing system, and might have even greater trouble in obtaining payment.

IV. Interest.

The legitimacy of land-rent and house-rent was never attacked until men had begun to dispute the rightfulness of landed property and house property. But the legitimacy of interest was keenly assailed long centuries before any one ever dreamt of denying public property in capital, and ages before socialists began to exist. Its opponents have not merely been a few troubled spirits, but have comprised the most illustrious representatives of human knowledge, — ancient philosophy, with Aristotle; the Catholic Church, with the Fathers; the Reformed faith, with Luther; Civil Law, with Pothier, — the list might never end if we were to enumerate all those who have fought against this form of income, and have branded it with the name of *usury*. For centuries prohibited in greater or less degree by civil and by canon law, loan for interest still bears the brand of this old-time reprobation in its limitation to five per cent by the French law of 1807. But no one has ever thought of fixing a tariff for landlord or house-rent. This law of 1807 had fixed the rate of interest at five per cent in civil matters, and six per cent in commercial matters. The latter restriction, which was practically a dead letter, was finally abolished in 1885. The limitation still subsists for loans made by other than business men, and it has long been debated whether this survival, too, ought not to be abolished, and perfect freedom as to the rate of interest thus inaugurated. For more than a century the Liberal school has upheld this view, with the famous treatises of Bentham

and Turgot among their earliest manifestoes. This final abolition of all restrictions would certainly be the logical solution; but in some countries usury is still a public scourge, especially in rural districts, and its branding by law is by no means disadvantageous; for, whatever may be said to the contrary, laws do help to form morals.

There must have been some reason for this general disapprobation of usury, nor is it difficult to find.

With farm-leases the income may be seen, so to speak, to proceed from the earth itself in the shape of crops, and it is thus perceived that the rent paid to the landlord is not abstracted from the farmer's pocket. The latter only returns the produce of the instruments of production that have been entrusted to him; and as he does not give back more than a portion, he must make some profit after all.

With loans, however, the returns do not visibly proceed, as interest, from the money-bag that has been lent; for as Aristotle said, "One coin has never given birth to another coin." Thus the borrower's pocket was regarded as the only source from which interest could spring. It was in accordance with this view that, in his comparison of the landlord and the capitalist, Saint John Chrysostom waxed wroth and asserted "that the lender practised a damnable form of agriculture, reaping where he had not sown."

It may be rejoined, no more does a house produce anything, and the tenant has to pay the rent out of his own purse. Granted; but, though it is unproductive, a house is not consumed, and when the lease falls in, the tenant need only give up the house as it is, and is then free of further liability; whereas it is believed that capital is not only unproductive, but must necessarily be consumed. Thus, when the date of payment comes, the unfortunate borrower will have to draw upon his own property, not only for interest, but for the principal to boot.

We must confess that this opinion was a sound one, both during antiquity and in the Middle Ages. For long centuries loans were almost exclusively loans for purposes of consumption. The

Roman plebeian who borrowed from the patrician to buy bread, the knight of feudal times who borrowed from the Jew to purchase armor, both devoted the money they received to consumption which was personal, and therefore unproductive.

Under such conditions lending could not but be an instrument of ruin, and hence the justification of so ancient and wide-spread a prejudice. But at the present day the circumstances are radically altered. In old times the rich lent to the poor; it is now the poor who lend to the rich. Thus the Suez Canal was made by the loans which the Company received from people of small means. Formerly men borrowed so that they might live; nowadays they borrow to make their fortunes. In past time it was considered necessary to protect borrowers against the rapacity of lenders; in our days it might be more expedient to set about defending lenders against the sharp practices of borrowers. In fact, credit has now assumed its real character, and the only one it ought to possess in economic organization; it has become a mode of production.

We do not mean to say that the deplorable and ruinous forms manifested by credit in older days have yet entirely disappeared. They are still kept alive by the young men with "expectations" who sign promissory notes, by the badly off who buy on credit at retail shops, and most of all by the governments that issue loans so that their cannon may be fed; but these are the exceptions. The largest part of the huge sums that daily pass from hand to hand through the instrumentality of credit is excellently employed in productive labor.

Hence the old prejudice against the legitimacy of interest has grown to be out of date. Capital which is borrowed serves to produce, just as well as land which is leased as farms; and the interest paid is only a share taken out of the profits that have been made, and is not a toll levied on the personal labor of the borrower. Further, we cannot call capital, like land, a sort of deposit which society has entrusted to the owner for him to turn to profitable use by means of his labor. Capital has not been

thus entrusted to the capitalist by society; it is the creation of the capitalist himself.

When once we thoroughly understand the part that capital plays in production, the question as to the legitimacy of interest is virtually settled, and it would be idle to discuss all the arguments for or against loan for interest which lawyers and theologians have accumulated in a long course of learned casuistry. Even the socialists have ceased to speak of them. But with them the controversy has been transferred to another quarter. They do not deny that interest is the necessary, and therefore the legitimate, consequence of private property in capital; but they strike nearer home, and attach this very private property in capital. We can only refer to our previous discussion of this theory.

It may not be inexpedient to summarize the arguments for and against interest. They have been recently revived by M. Modeste in his book *Le prêt à interêt, dernière forme d'esclavage* (Lending at interest, — the last form of slavery). Putting aside the classical argument drawn from the unproductivity of capital, the two following are the best known.

Firstly. It is said that by lending his capital the lender incurs no real privation, and that therefore he has no claim to any compensation in the shape of interest. This assertion has been foolishly answered by an attempt to prove that the lender does suffer harm; but that is not the question, and it is no matter whether he deprives himself or not. What principle binds me to put gratuitously at the disposal of my fellow-men all the property that I cannot or do not wish to make use of myself? Must I allow other people to make their abode in my room because I am obliged to be away, or let them eat my dinner because I am not hungry? Such a claim would need to be based on the principle that a man has a right only to the amount of wealth that is necessary for his own consumption, and that the surplus belongs by right to the general bulk of mankind; clearly, that is simple communism, and the whole argument is idle when once we have admitted the right to private property.

Secondly. The second argument states that perpetuity of interest is a monstrous thing. At the rate of five per cent (without reckoning compound interest) at the end of twenty years the lender will by the successive payments have recovered all his capital; in forty years he will have received it twice over, and in a century five times over. Yet all the time he retains his right to the entire reimbursement of the capital.

We must answer that payment of interest is by no means the same thing as repayment of the capital, any more than rent is the same as the purchase price of land. The two things are altogether unrelated. Interest is the price of a service rendered, the payment for the use of an instrument of production for a certain time. Now, if the service rendered is constantly renewed and the use made of the instrument can be perpetual, why should not interest also be perpetual? We grant that capital does not last forever; some capital is instantaneously extinguished, other capital ceases to exist after a certain time. But every operation of production (if only it is well done) should either immediately, or sooner or later, reproduce a value equal to that of the capital consumed. Otherwise it would not be productive. Like the phœnix, capital eternally rises again from its own ashes. This question of the legitimacy of interest forms the subject of a discussion between Bastiat and Proudhon in the collected works of the former.

V. Does the Rate of Interest tend to fall?

The progressive and continuous fall of the rate of interest is as well accredited as any theory in political economy, and economists of the classical school cite it as an example of a law which is both natural and harmonious. Their method of proof is as follows: —

There are three elements in interest.

Firstly, *the price paid for the hire of capital.* This is the essential element, and is determined by the law of supply and demand; that is to say, by the greater or less abundance of capital in the market.

Secondly, *the premium of insurance against risk.* For, though the lender is not concerned in the business, and therefore need not be anxious about losses, he always runs one risk, namely, the insolvency of the debtor.

Thirdly, *a share in the produce of the business.* Though the lender takes no actual part in the business, and consequently shares in the profits no more than he does in the losses, yet his portion will clearly be the larger, the more productive is the employment that the borrower makes of his capital.

These variations in the three factors are measured by the rate of interest. We know that, other things being equal, the rate of interest is higher the scarcer capital is, or the greater the risk to be run, or the greater the facility of obtaining more productive employment for the capital. The simultaneous action of these three causes in colonies or new countries, such as Australia and the United States, maintains the current rate of interest in those regions at eight or ten per cent, or even higher. Now, these causes, which tend to raise the rate of interest in a new society, ought to have the reverse effect in a society which is growing old, and should therefore induce a progressive lowering of the rate of interest. The exponents of this theory hold that the further we proceed, capital will undergo certain changes. It will be less productive, for the employments that are possible for it will grow scarcer and become less and less remunerative. It will be more plentiful, for it will have been accumulated in large quantities by a course of saving which has been carried on for many generations. It will be safer; for a growing security — political, legal, and moral — will tend to arise from a calmer life, from more civilized, if not more honest, customs, from a more regular administration, and from a government which obtains a readier obedience.

Were this law of the progressive decrease of the rate of interest a really certain one, it would be highly beneficial both in the distribution and in the production of wealth. From a distributive point of view, as it would steadily reduce the levy made by capital on production as a whole, it would proportionately increase the

share that falls to labor. For we must remember that the rate of interest does not only determine the income of capitalists; it also indirectly determines the rate of profits, house-rent, and agricultural rent; in other words, the income of all the possessing classes.

In the matter of production, the very fact that it would continuously lower the price paid for capital and therefore the cost of production, would facilitate the execution of undertakings which up to the present have been impossible. For instance, take a piece of land that might be cleared, or houses that might be built for workmen's dwellings; — they cannot yield more than three per cent. With the current rate of interest at five per cent, no capital could be found for such undertakings, or they could only be carried on at a loss. Hence they will not be attempted; but if the rate of interest falls to two per cent, every one will hasten to take up such businesses. Turgot, in a celebrated figure, has compared this fall of the rate of interest to the gradual sinking of the waters through which new lands can be put under cultivation.

Though we do not altogether deny the force of these arguments, we cannot consider that this law is sufficiently proved. The value of capital, like the value of land, of manual labor, or of any other article, is determined by its utility and its scarcity. The most rational forecasts show that capital must tend to become more and more plentiful, but we see no reason why it should become less and less useful.

The supply can constantly increase; but, given the exigencies of production, the demand should do the same. There is no proof that the risks incurred in producing are less than they used to be, or that they will grow less in the future in proportion to man's increasing boldness and enterprise; say, when he travels by balloon instead of by rail or steamer. Nor is the theory in accordance with history; at the fall of the Roman Empire, fifteen centuries ago, the rate of interest was almost the same as it is to-day; and in the Low Countries, in the eighteenth century, it was perhaps rather below the present rate. Moreover, if the rate of interest is destined to fall in an unlimited progression, we ought

to be logical to the end of the series, and say that some day it will fall to zero. Professor Foxwell, the English economist, has had the courage to do this; he declares that the time will come when capitalists, instead of receiving interest from those to whom they entrust their money, will have to pay them for keeping it for them. Then will the socialists rejoice, for Proudhon's dream of "gratuitous credit" will have been realized; but wisely enough, they do not regard such a state of things as one of the certainties of the future.

M. Paul Leroy-Beaulieu, who is one of the strongest defenders of this theory of the progressive fall of the rate of interest, relies mainly on the notion that business is destined to become less and less remunerative. This prediction is rash as far as regards manufacture; in agriculture its accuracy seems to follow from the law of diminishing returns, though M. Leroy-Beaulieu inconsistently refuses to accept that law. But the meaning of the law is, that to double the products, three or four times as much capital must be consumed; therefore, the less generous to us land becomes, the more necessary and the more in request will capital be.

CHAPTER V.

THE INDIGENT.

I. The Right to Relief.

The various classes of persons that we have passed under review live either on the income they receive from some form of capital, or on the returns from their labor. But in every society there are a certain number of men who have neither of these resources to fall back on, for they own nothing and do not work. They are consequently in danger of starving. There may be three reasons for their not working.

Firstly. They may not have the *strength* to work. This applies to children, to the aged, and to all those who suffer from chronic diseases or infirmities.

Secondly. They may not possess the *means* of working. It is not enough to be willing to work; a man must also be able to find work; in other words, he must have at his disposal the necessary materials and implements. But in times of crisis and during a lockout both these conditions are wanting.

Thirdly. They may not be *willing* to work. All labor demands a more or less toilsome effort, so that many men, rather than make this effort, and what is worse, submit to the discipline that labor always requires, will prefer to run the chance of dying of hunger.

Now, the presence of these three divisions of the indigent class cannot be ignored by society, and must claim attention.

Common humanity of itself urges us to take care of the first category. In the natural order of things, the family should support those of its members who are unable to keep themselves;

but in our days the family is often scattered, and in the case of natural children (70,000 or 80,000 of whom are born in France yearly) there is no such thing as a family. Society, then, must take its place. If a civilized society has to allow its children and the aged to die of hunger, it had better return to the savage state and kill them outright, for that would be less cruel.

Society cannot neglect the second class, for it is partly responsible for their position. Its own economic constitution causes this artificial, we might say unnatural, separation of the laborer from the instrument of his labor, and compels him to seek work in order to live. Crises and lockouts proceed from the very action of the law of progress, as manifested in large production, in mechanical inventions, in international trade, and in competition. It is fitting that society, which in its corporate form benefits by each step of progress and receives all the fruits of victory in the great battle of life, should also bear the burden of the fray, and succor those who are wounded and vanquished.

The third category, though far less interesting than the foregoing, claims the attention of society because it constitutes a public danger. The vagabonds and the beggars are the recruiting-grounds of the army of crime. Whenever any of these commit any offence, society is obliged to house and feed them in jail; and as nothing is more expensive than the support of a prisoner, it is at once more prudent and more economical to aid possible prisoners before they actually become such. In the new model prisons in France each cell costs £240.

The right to be succored that these various classes of persons possess is called the *right to relief*, or the right to charity. Socialists find something humiliating in the former phrase, and prefer to use the terms, the *right to existence*, or the *right to labor*, for those who are able-bodied. These are fine words, but at bottom they mean nothing more than a man's right to demand of society, *i.e.* of his fellow-citizens, the wherewithal to live. Besides, this right to labor merely aims at the wages to be earned; the work is only a means to that end. In reality labor is not a right, but

a duty. Now, there is nothing humiliating in a man being supported by his fellows when he is unable to keep himself, and it may be legitimately claimed; none the less, whatever name we give it, it is an act of relief.

But when we employ the phrase, we must bring out its whole force, and note that its correlative is an obligation on the part of society, which arises from nature and also from law. Many economists think that charity or relief is a duty for society, but not a right for the needy; but that is mere legal hair-splitting. Whenever a person is in a certain state which the law has to determine, society ought not to be able to evade the obligation of aiding him, and the necessary expenditure (for to that in practice is reduced the question whether the relief shall be binding by law or optional) ought to be officially entered in the accounts of the State or the parish.

The classical school, especially the adherents of Malthus, protest against legal relief. Its arguments may be summed up in the familiar formula, "The numbers of the indigent tend to increase in direct ratio to the aid that they can reckon on." The following is the ordinary way of proving the dictum.

Firstly. The right to relief tends to encourage improvidence. There are numbers of people who might perhaps have conquered their troubles had they had only themselves to depend on; but they neglect to put by for their old age or to provide for their children, because they count on the State performing these offices for them. As the farm-hands say in England, —

> "Hang sorrow and cast away care!
> The parish is sure to find us!"

Secondly. The right to relief incites the pauper classes to increase their numbers. What have they to lose from having many children, if they are freed from the care of rearing them? Nay! they gain thereby, for the charity that is distributed is necessarily in proportion to the number of children. Thus, a kind of bounty is paid for the swelling of the numbers of the wretched,

and in the lowest depths of society a stratum of paupers is formed. Their names are on the workhouse book, just as the names of all of independent means are on the income tax lists; generation after generation they transmit the heirloom of their rights and of their vices. A despised race are they, who are too degraded to be dissatisfied with their lot and ever to aspire to rise above it.

Thirdly. The right to relief tends to weaken the productive classes of society in the interests of the unproductive classes, and is thus in direct opposition to natural selection, which tends to improve the organism by causing the higher to prevail over the lower elements. It is obvious that paupers are not the healthiest or the most vigorous portion of the social organism. Now, society can only support them by means of taxes which it has to lay on the product of the labor of those who do produce. But as paupers increase *ad libitum*, the toll which they levy on the true workers will also grow heavier and heavier, and in the long run may hurl into pauperism this really industrious class. As there are many men who can only just make both ends meet, and who are on the verge of indigency, a slight pressure of this tax may drive them down beneath that fatal level to swell the numbers of the poor. In England small proprietors are sometimes unable to pay the poor-rate, if it grows too heavy, and are then turned out of their houses; their means are exhausted, and they become recipients, instead of givers, of relief.[1]

This theory of the proportional increase of paupers is certainly too dogmatic, for it is now recognized (and statistics are not hostile to the assertion) that the number of recipients of relief in England is regularly diminishing year by year.

These arguments only show that we cannot be too careful in the organization of public charity, but they must not make us condemn the right to relief.

[1] This has been largely the result of more stringent administration, *i.e.* the relief has become less and less to be reckoned on. It has become more and more difficult to get. — J. B.

It is true that a prospect of the receipt of a virtual income from public charity may reduce productive activity or diminish saving; but the same effect is more surely brought about by the certainty of a pension, the hope of an inheritance, or the mere possession of a certificate of government stock.

It is true that the economic evolution of the social organism may be injured by our supporting and keeping all those who are diseased, infirm, incapable, or idle, or who are only simpletons and careless of their affairs; but moral evolution, which is of no less importance, would be seriously harmed if the guiding principle of any society was, "Blot out the wretched!"

Finally, it is true that the birth-rate is higher in the classes who receive relief than in those who support themselves; but, if the children of the former can be made useful citizens, the apparent harm would be really a benefit, especially in France, where the wealthy classes either cannot or will not increase their numbers.

II. The Organization of Public Relief.

Public relief should be organized on the following principles: —

Firstly. It should be carried out by the *district or local authorities*, or by the parish, as is the case in England. For, as the commune or district is usually a small society, it has far more facilities than the State for discriminating between those who are really in want and those who are not. Further, it is generally more saving of its money. Under this system no one has a right to relief except in the district or parish to which he belongs. This obligation of legal domicile has some disadvantages, for in particular it stirs up interminable disputes between respective districts; but in France it might have the special advantage of keeping agricultural laborers in the parishes of their birth, and of thus partially preventing the depopulation of the rural districts and the filling to repletion of large towns. The various parishes might be saved from a too great inequality of their expenses, if they were to amalgamate together as they do in England; and if their

funds were really insufficient, the State might come to their aid.

Secondly. Relief should be *obligatory;* in other words, the expenses should be provided for by a special fund. This is not so in France; of course, like every other civilized country, France has a system for distributing relief, and in this way more than £2,000,000 are spent yearly, — the "Budget of Public Relief" amounting to £1,600,000 for the local parishes (over half of which goes to Paris alone), and £520,000 for the Central Government. But this expenditure is in the main optional alike for communes, department, or government; though there are two classes of paupers for whom expenditure is partially compulsory, namely, foundlings and the insane. No law has ever organized the right to relief in a positive way, though it has figured in most of the numerous Constitutions with which France has been blessed; hence it has remained as an empty abstract principle. The mainsprings of public relief in France are charity boards (*bureaux de bienfaisance*), hospitals, almshouses, homes (*hospices*), and asylums. The charity boards give outdoor relief to the needy; the almshouses and asylums shelter the aged, children, and the helpless (*i.e.* the blind, deaf mutes, and the insane); the hospitals receive the sick.

There are 15,780 charity boards in France; but as there are 36,117 communes in the country, more than half (but, we may observe, the least important of them) lack such useful institutions. Their income (including local subscriptions) amounts to about £2,000,000; but, as they do not distribute very much more than £1,000,000 a year, and the recipients of relief exceed 1,400,000 in number, the average per head yearly is the preposterously small sum of 17*s.* 6*d.*, or so.

Far ampler are the resources of the hospitals, asylums, etc., for these amount to more than £5,000,000 (State and local contributions being included). Most of these institutions belong to their respective districts, though a few are government property. The hospitals fulfil their requirements adequately, but the asylums and

almshouses are less satisfactory. This is especially so with almshouses for the aged; admittance into these can only be obtained on payment of board, or by orders which are very difficult to procure. In fact, the condition of the aged poor in France is a disgrace to the country.

All these institutions are directed by administrative committees; their main income is derived from property which they have acquired, either by gift or by bequest, in their capacity of charitable bodies; besides the local subsidies, mentioned above, which are purely optional, they have a few other minor sources of revenue. For example, the State allows them the proceeds of a few small taxes, such as the ten per cent levied on the receipts of theatres and of public performances.

In England, as in all other Protestant countries, public relief is obligatory. In that country it is organized by a series of laws, the first of which was passed in the reign of Queen Elizabeth, the whole body constituting an imposing edifice of legislation. Each parish provides for the necessary expenditure by a special tax known as the poor-rate, which amounts to about £8,000,000.[1]

On this question of public relief and legislation thereon, Europe may be divided into two well-marked portions. All Protestant countries recognize the principle of compulsory legal relief; in Catholic countries public relief is only optional. There is a curious historical reason for this. During the whole of the Middle Ages, Catholic bodies, *e.g.* the monasteries, were entrusted with provision for the needy; in the countries which accepted the principles of the Reformation, the State, on assuming the possession of the property of these religious bodies, also took over all their duties, including this duty of supplying relief.

Thirdly. But this relief should so far as possible be carried on in *special institutions, respectively adapted for the various classes of paupers.*

[1] For the year ending Lady Day, 1888, the amount actually expended in England on relief was nearly £8,500,000; in Scotland, £887,000; in Ireland, nearly £1,391,000. — J. B.

(*a*) It should be administered to the really helpless — children, the old, the blind, and so forth — in homes and asylums, the places in which should always be in proportion to the requirements.

(*b*) Able-bodied paupers, who have no work to do, should be received in workhouses, which they should be free to enter and free to leave; in a more special manner, they should be drafted into agricultural colonies, and should be employed in field labor.

We have previously refused to admit the right to work; but when dealing with the relief of able-bodied paupers we must retain the obligation to work, which is quite a different thing. But it is not easy to find a productive form of labor, and it is particularly difficult to force the recipients of relief to execute it. Every one knows the barracks-like workhouses of England, the inmates of which have to perform work which is degrading by its very uselessness; such as making ropes out of tow, and then untwisting the ropes to reconvert them into tow.

Far more satisfactory results have been obtained by the agricultural colonies or settlements in Holland and in Germany. In these places the paupers work more willingly; they do not feel that they are pent up in prison, and, above all, their labor is infinitely more productive, for most of these institutions almost pay their own expenses. Further, and this is the essential aim of all relief, many of these needy folks are enabled to emerge from the pauper state, and become farmers or even landowners. Fuller details on this system and all the other various forms of public or private relief may be found in M. Robin's book on *Hospitalité et Travail.*

(*c*) Vagrants and beggars who refuse to work should be confined in houses of correction and should be compelled to work; the period of confinement should be long enough to allow of the exercise of a moral and reforming influence.

On this matter the French law is absurd. In the opinion of the Penal Code it is an offence to have no home or visible means of existence; and every year sentences of a few days of imprisonment are passed on tens of thousands of unfortunates, who are guilty of having neither hearth nor home. The kind prison grants

them these during their brief sojourn; but when they leave, what can they do but begin again? Thus they pass their life in a constant succession of convictions, until their ripe experience of prisons turns them into hardened criminals. Not until law has established asylums for all paupers will it be able to do away with beggars and punish vagabonds; and then it must beware of shutting them up for a few days only, and especially of associating them with professional criminals.

It must not be inferred from our suggestions that the public organization of charity should absolutely forbid outdoor relief; for that system has the great advantages of being far less costly and of not breaking up family life by enforced separation. But, generally speaking, public officials are unable to practise this form of relief with due discernment, and experience shows that in their hands the unworthy members of the poorer classes are favored, and that their numbers tend to increase to an unlimited extent.

After a celebrated inquiry which was made in 1834, the English altogether abandoned the giving of outdoor relief, and confinement in the "Union" was prescribed as the necessary condition of all public assistance; since then, however, this rigorous provision has been gradually relaxed. We have already observed that the French charity boards were established solely for the purpose of outdoor relief. The foregoing discussion brings us to our last rule.

Fourthly. Whenever public relief takes the outdoor form, private aid should be made use of as far as possible; the necessary inquiries and the distribution of relief being entrusted to private individuals who are willing to help.

Voluntary workers are always superior to agents who are officially appointed by the local authorities, as in the case with the French charity boards, or who are chosen by committees such as are charged with these functions in England. From a felicitous union of public relief and of private charity arises the superiority of the famous Elberfeld system, an article on which appeared in

the *Revue d'Économie politique* for 1887 from the pen of M. Saint Marc.[1]

In all cases, however, outdoor relief should be administered under the two following restrictions: —

Firstly. It should be given not in money, but in kind; for example, in tickets for public kitchens, or in food and other articles bought by the distributors of relief themselves.

Secondly. A prior inquiry should always be made, and that the investigation should be thoroughly done it is necessary to have an office specially devoted to the obtaining of information. There exists in Paris an agency established by private initiative, which has rendered most valuable service in this respect.

III. Is Pauperism on the Increase?

It is a disputed question whether the indigent or pauper classes are or are not increasing in number. Naturally, the socialists assert that there is an increase, and consider it to be a demonstrable fact that the rich are always growing richer and the poor poorer. The optimists deny this, and show by statistics, especially English statistics, that the poor are on the decrease. In this matter figures are of little value, for there is no more elastic a term than pauperism. An answer to the question must rather be found in a consideration of those various causes of poverty which we have previously pointed out. We divided the indigent or paupers into three classes: those who are prevented from working through weakness or infirmities; those who might work if they had a chance, which they have not; and those who do not want to work.

As regards the first class, the progress of hygiene and of science as a whole ought to be able to reduce the numbers of those who are stricken with incurable infirmities. At any rate, some of them, such as the blind and the deaf mutes, should be put in the way of plying a productive calling. On the other hand, the ranks of

[1] See the English Government Blue Book "Reports on the Elberfeld Poor Law System and German Workmen's Colonies" (C. 5341), 1888. — J. B.

the insane are being terribly swollen by several causes, the chief of which is the abuse of drink. Another potent cause of pauperism, the birth of illegitimate children, is likewise on the increase.

We must say without hesitation that the second class is exhibiting a tendency to grow; the loss of work which results from mechanical inventions or from excess of production, the economic crises which spring from the evolution of large production and of international competition — these were unknown to our fathers, and are the peculiar characteristics of our own time.

To take the third division: we might be justified in thinking that, with the progress of public education and under the influence of the more sedentary customs of civilized life, we might get rid of the idleness, love of roving, and pure rascality which were such potent factors in the social life of the Middle Ages and of antiquity, and still retain their power in the East. Yet we must not rely too much on the realization of such hopes. Vagabonds, tramps, and beggars still exist in our midst in huge numbers, nor do they show any signs of growing fewer; and the occupation of "professional beggar" is becoming more lucrative than ever. Out of 119,000 offenders who appeared before the French police courts in 1886, 33,000 were classed as vagabonds or beggars. In Paris there are about 8000 people who take their night's rest in the streets or under the arches of the bridges.

After full consideration, we are led to conclude that, in modern society, the causes which tend to develop pauperism are more active than those which might effect its diminution. But we will not add that pauperism will exist forever and be a constantly heavier burden. Unless we are utterly to despair of the future of our race, we must hope that some of the above-mentioned causes, and perhaps the most powerful of them, will be mitigated by the advance of time. Poverty, which arises from individual and natural causes, such as the feebleness of old age, disease and illness, and physical and moral infirmities, may, perhaps, be relieved by a sound system of insurance. But the pauperism which is the result of general and economic causes can be put to flight only by radical alterations in the present social order.

APPENDIX.

THE PUBLIC FINANCES OF FRANCE.

I. Public Expenditure.

THE constant increase in public expenditure is one of the characteristic features of the time. At the beginning of the present century and until the year 1830 or so, the public expenditure of France scarcely exceeded £40,000,000 sterling; it has now reached the figure of £130,000,000, and if we include the separate expenses incurred by the communes and departments, the whole will amount to £160,000,000. Thus, in less than a man's lifetime, it has more than trebled.

We reproduce in an abridged form from M. de Foville's excellent statistical handbook, *La France Economique*, a table which shows the successive increases of the French budget from the days of Saint Louis.

	FRANCS.
Saint Louis (year 1243)	3,700,000
Francis I (year 1515)	72,800,000
Henry IV (year 1607)	90,800,000
Louis XIV (year 1683)	226,000,000
Louis XVI (year 1789)	475,000,000
Napoleon (year 1810)	1,007,000,000
Louis Philippe (year 1840)	1,363,000,000
Napoleon III (year 1869)	1,904,000,000
Republic (year 1891, estimated)	3,247,000,000

Now, the recent phases of this phenomenon may be partly explained by the general augmentation of wealth and the fall in the value of money; but the enormous increase of public expenditure cannot proceed from these causes alone. There must be

others. A full examination of the question may be found in the book of M. Wuarin, a professor at Geneva, on "Le Contribuable, ou comment défendre sa bourse." ("The taxpayer and how to defend his pocket.") We must confine ourselves to the following.

Firstly. One great cause is the *growth of the military spirit* with all its consequences, *i.e.* war and an armed peace which is as costly as war. Nearly two-thirds of the £130,000,000 spent by the French government are used in paying for past wars or in preparing for future wars. Forty million pounds are required for the French army and navy estimates, including the so-called extraordinary estimate, and the army pensions. Further, almost the whole of the arrears or interest on the public debt, which are £44,000,000 yearly, are the result of loans which were made in the past to meet war expenses or to pay war indemnities.

If the man in the moon, or rather an inhabitant of Mars, were to visit our planet, and learn that a civilized country like France was obliged to spend £40,000,000 a year to insure its safety, he would pity her for having such barbarous nations as neighbors; but his astonishment would be unbounded if he were further told that these neighboring countries, which can justly claim to be as civilized as France, feel obliged in their turn to make almost as great sacrifices for their own defence against her. Under this head the new countries in America and Australia have but trifling burdens to bear; for they have no neighbors, or rather their neighbors are (fortunately) savages. As has been sagely observed, this enormous inequality in expenses, in their favor, must finally give them a decisive economic superiority over our European lands.

Secondly. A second potent cause is the *gradual extension of the functions of the State*, for each item in public expenditure corresponds to some function of the State. But one of the most disputed questions of the day is the precise determination of what duties the State should take upon itself, and how far its action should go. We know that the Liberal school would reduce this action to the very minimum; in its opinion the State should con-

fine itself to the protection of individual liberty by maintaining order at home and preserving peaceful relations abroad; in other matters individual initiative will be far more successful.

In his *Précis d'Economie politique*, M. Leroy-Beaulieu sums up the various shortcomings which in the opinion of the Liberal school should lead us to discourage any extension of the functions of the State.

Firstly. In the first place, the State has less initiative and is less active than private persons, for it does not feel the spur of private interest, and has not to fear competition.

Secondly. The State has no real superiority over individuals, either in ability, or in impartiality, or even in continuity in its plans and actions. This arises from the origin, working, and inevitable vicissitudes of any government under any system whatever, but it is especially marked in the democratic *régime* which is now becoming the rule.

These arguments are not irrefutable. Individuals, no doubt, have given the world all inventions, discoveries, enterprises, above all, ideas, for a collective body is devoid of ideas. Still, many of these projects, — such as the abolition of slavery, of serfdom, of corporations, — have been effected by the State, and perhaps could not have been carried out by private persons. Yet, without requiring the State to enter into competition with individuals, still we can and ought to demand this much from it: it should represent and guard the collective and social interests against the constant encroachments of individual interests. That, surely, is a large enough task!

The school called State Socialists does not accept the Liberal school's theory of the "State as policeman." It attributes to the State a far higher mission, — not merely the seeing that justice is done, but the inauguration of a reign of justice; hence State interference can, and ought to be, extended to a host of points in our social system.

Neither of these two schools represents the extremes of their respective lines of thought.

Beyond the Liberal school we find the anarchists, who entirely do away with the State, and public expenses along with it. Pushing to their extreme consequences the arguments urged by the Liberal school, the anarchists proceed to declare that individual initiative is perfectly capable of preserving order and security at home and abroad. Men are able to govern themselves; and that, indeed, is the *sine qua non* of their freedom. In the matter of justice, all crime can be repressed by an exercise of lynch law, and lawsuits can be settled by the appointment of arbitrators. Besides, the abolition of private property will do away with most offences and with all actions at law. The country can be thoroughly protected from attacks by the levying of voluntary militia in case of need; and further, the abolition of distinctions between nations and the blotting out of frontiers (another item in the anarchist programme) will inevitably put a stop to all war.

Beyond the State socialists we find the collectivists, who turn the State into the general supplier of all social and economic wants. The State will provide for the education of all children, will support the aged, will be the only landed proprietor, and be the sole carrier-on of all trade and all industry. Then, as all individual enterprise will be converted into a public service, and all private incomes become salaries, individual expenses will tend to be absorbed in the expenditure side of the State accounts.

According, then, to the pet economic doctrine which a man chooses to adopt, public expenses can range from zero up to infinity, and it is curious to note that the schools which occupy the opposite poles of thought both demand socialism.

We cannot here incidentally discuss the complex question of State interference. It is enough for us to note that all countries (England, the land of "self-help," included) are showing an increasingly marked tendency to widen the State's sphere of action. This is manifested not only in the large development of some branches of the public service, such as public education or public works, but also in the formation of new State offices, or at any rate, of important ministerial departments. Among these

are offices or boards which deal with agriculture and with trade. That which is concerned with labor is of very wide scope; for it superintends manufactures, so as to insure the due observance of laws which restrict the hours of labor, or prescribe certain steps for the security of the employed and of the public. Besides having to deal with factory legislation in general, it has to issue statistical reports which relate to labor, such as the excellent publications of the Labor Bureaux in the United States. Public relief engages the attention of another office; nor must we omit the board of public health, which is concerned with unsanitary dwellings, the prevention of epidemics, and the adulteration of food.

Naturally enough, this further extension of the functions of the State necessitates a proportionate increase in public expenditure. Indeed, it is the second cause which we assigned for that phenomenon, and it is far more easily justified than the first cause, the growth of the military spirit. It is right that the expenses incurred on behalf of the collective interests should be heightened as social organization develops, and as men perceive more clearly and appreciate more earnestly the solidarity which binds them together. This enlargement of the duties to be performed by the State might be dangerous if it ever deadened individual energy; but up to the present the due bounds of the action of public authority do not seem to have been exceeded by any modern government. In most civilized countries the functions of the State fall under the following heads: —

Firstly. The maintenance of order and the administration of justice at home. This duty falls, in England, to the Home Office; in France, to the Ministries of the Interior, and of Justice.

Secondly. The preservation of safety as against foreign powers. This is undertaken by the Foreign Office, the War Office, and the Admiralty.

Thirdly. The furthering of the intellectual and moral development of society. This is provided for by the Education Office, and ministries relating to Public Worship and the Fine Arts.

Fourthly. The development of the productive powers of a country. Such resources are superintended by government departments referring to Public Works, to the Postal and Telegraph services, to Agriculture, and to Trade.

It is difficult to see which of these public functions could be subtracted from the list; on the contrary, it could be easily swelled by the addition of departments relating to Labor, to Public Relief, and Public Health.

In any case it would be unjust to saddle so-called State socialism with most of the responsibility for public burdens. If from the £130,000,000 sterling which are spent by the French government we deduct the £40,000,000 for the army and navy, the £40,000,000 on the public debt (which is mainly the outcome of war), and the £16,000,000 or £20,000,000 which are the cost of the collection of taxes, about £30,000,000 of public expenses remain over for distribution amongst the various offices. When we remember that the total revenue of France is calculated to be £800,000,000 to £1,000,000,000 sterling, it scarcely seems excessive for three or four per cent of this sum to be devoted to expenses needed for the public welfare. Still, it is only fair to add the £32,000,000 to £36,000,000 which represent the independent expenditure of the various departments and communes. Then the proportion of the collective expenses to the entire revenue is raised to seven or eight per cent.

II. The Public Revenue.

Private persons are obliged to regulate their expenses according to their income; the State, on the contrary, usually fixes its receipts according to its expenditure. As, in France, for example, it requires £130,000,000 for the accomplishment of its various functions, that is the very sum it will ask for from its taxpayers. The government has an incontestable right to make this demand, for it is just and indispensable that each member of every society should bear his share of expenses of a public nature. Of late

years several learned treatises have been published, especially in Germany, in Austria, and in Italy, on the economic theory of taxation, viz.: on the determining whether a tax is the price of a service rendered by the government. A complete summary may be found in Mazzola's *Dati scientifici delle finanze*. We, however, must proceed with our general discussion.

It is not an easy matter to levy £130,000,000 on a nation (or more than £160,000,000, if we reckon the separate expenses of communes and departments), for that makes no less than £4 a head for each Frenchman. Till the present day, statesmen and financiers have applied all their ingenuity to discovering sources of public revenue which shall burden the taxpayer as little as need be, and be imperceptible, if that can be possibly effected. Now, however, the tendency is to proceed on quite a different principle. We will now pass under review all the conceivable sources of public revenue.

Section 1. The Revenue derived from State Lands.

If the State were in the position of a private individual who has his own property, it might perhaps provide for all public expenses out of the revenue from its own possessions, and have no need to call upon the taxpayer; for it would be self-supporting.

Such was partly the case under the feudal system, and that state of things still subsists in semi-barbarous societies in which the private fortune of the sovereign and the property of the nation are scarcely distinguishable. The sovereign princes of India, like the former kings of France, support their armies from, and themselves depend in large measure on, the revenues of their own domains. But in civilized countries State lands, as a rule, have been reduced to a mere shadow of their former extent. In France nothing remains to the State save forests and a number of unproductive tracts. The gross returns from the whole are not more than a couple of million pounds, and the necessary expendi-

tures on these estates would reduce that sum by half. That is a mere drop in the ocean of public expenses.

However, in some countries, particularly in Prussia and the other German States, the revenue from the crown domains amounts to a good many million pounds; but these estates are not merely forests, but also include farms, mines, and factories.

If the current theories of land nationalization are ever actually applied, — for instance, if the governments of the United States and of the Australian colonies were to decide to reserve for themselves the proprietorship of public lands, and were only to grant them to private persons as temporary holdings, — in that case the future might witness the formation of State domains of large extent and the consequent abolition of all or some taxes. That is one of the chief arguments adduced in favor of the systems of land nationalization.

Section 2. Revenues proceeding from Various Industries and Monopolies.

For the State to be self-supporting, we are not obliged to conceive it as possessing estates and holding the position of a landowner who lives on the income he derives from his property. We can equally well suppose that it founds an industry or starts a lucrative business, and thus earns its living like any ordinary person.

This branch of the public revenue is of very considerable importance, and tends to increase daily in proportion to the development of State socialism. In France, in particular, the State carries on industries of the most varied kinds. It manufactures money (in the shape of coin), tobacco, powder, playing-cards, porcelain (such as the Sèvres ware), and carpets (for instance, the Gobelins). In its capacity of printer it carries on the *Imprimerie Nationale*, and as a journalist it conducts the *Journal Officiel*. It works a partial system of State railways, and takes charge of all postal and telegraphic business. The returns from all these sources give a gross product of £30,000,000; but as heavy expenses have to be met, the net product is far smaller

and does not exceed £14,000,000. We give two of the principal items: —

	GROSS PRODUCT.	NET PRODUCT.
Tobacco (1884)	378,000,000 f. (about £15,000,000)	305,000,000 f. (about £12,200,000)
Post-office and telegraphs (1885) . .	167,000,000 f. (about £6,600,000)	30,000,000 f. (about £1,200,000)

Thus very large profits are made from the tobacco industry by the side of a very small return from the working of the postal and telegraphic systems; for the State rightly strives to make large gains in the former business, but only small profits from the latter.

The particular businesses carried on by the State vary in different lands. Thus in some countries private companies are the owners of the telegraph lines, whereas in others, for example, in Germany, the State works most of the railways and some factories to boot. Again, municipal authorities often take charge of the gas and water supply.

It has been recently proposed that the State should assume the control of a commercial enterprise which should yield at least £40,000,000 a year, namely, the sale of brandy. This scheme was suggested by M. Alglave, professor of Financial Science in Paris, but it has not been tried in France because the owners of small vineyards cannot be prevented from making brandy for themselves. However, other governments have embarked more or less deeply in similar enterprises.

We have now to ask whether this class of revenue, like the revenue derived from State lands, frees the taxpayer from all burdens. Our answer must be a twofold one. If this industry in question is conducted under *free competition*, and the profits made by the State are no higher than those that could be obtained by any private firm, then indeed no tax is really levied. But if the particular industry is managed under a *system of monopoly*, *i.e.* if the government prohibits all competition by private persons and makes use of its position to sell the article for a far higher price than the cost-price, then the additional price

that the consumer has to pay is clearly a tax in disguise; but the fact that it is disguised prevents the consumer from perceiving it. Now, most of the industries carried on by the French government, or at any rate the most important of them (tobacco, powder, post-office, and telegraphs), are worked under this monopolist system.

Section 3. Indirect Taxes.

Since the income that modern governments derive from the State lands and industries is far from sufficing requirements, further sources of revenue must be sought for. The laying of a duty on certain commodities was long ago found to be an important mode of obtaining revenue. This is certainly a tax, for the consumer will have to pay it in the shape of enhanced price, but it possesses two advantages. In the first place it is *disguised* in the very price of the article, and thus escapes the consumer's notice; there are few people who on buying sugar at so much the pound can tell what portion of the price constitutes the tax. Secondly, the tax is in a manner *optional*, for it is only paid on purchase of the article on which it is levied, and every one is free either to abstain from buying it or to purchase it in whatever quantity he wishes.

Under the same heading must fall customs duties which, legally speaking, do not differ from indirect taxes. Further, they appear to have the special advantage of causing payment of the tax to fall not on the citizens of the country, but on foreigners. That, if true, would be an ideal form of taxation, but as we have previously seen, the ideal in this case is not the real. Including customs duties, the indirect taxes in the French budget for 1884 amounted to rather over £40,000,000, or 1,074,000,000 francs, more than a third of the budget. The returns from the principal French indirect taxes are shown in the subjoined table:—

Wines, spirits, and other beverages (1886)	439,000,000 f.
Sugar (home grown and colonial) (1886)	138,000,000 f.
Salt (1886)	32,000,000 f.
Coffee (1885)	107,000,000 f.
Petroleum and schist (1885)	27,000,000 f.
Conveyance of passengers and goods by express trains (1886)	92,000,000 f.

Section 4. Taxes on Legal Documents and Various Incidents of Daily Life.

There is a limit to the number of the commodities on which a duty can be imposed; for they require to be at one and the same time articles which are consumed in large quantities, so that the tax shall have some scope, and not to be indispensable to existence, for that would give a harsh character to the tax. Instead, therefore, of burdening commodities, financiers have resorted to the plan of taxing certain legal processes incidental to life, — such as successions, receipts, lawsuits, conveyance, etc., — by means of registration duties and stamp duties. From the governmental point of view these taxes have the further advantage of affecting the taxpayer only indirectly, or, at any rate, at the moment when he feels them least. The man who receives an inheritance, particularly if it is a windfall, can very well bear to give up a portion of it to the State. The man who buys an estate is previously aware of the amount of succession duty that he will have to pay, and regulates accordingly the price he has to give.

The penny stamp, which is the equivalent of the stamp required in France for every receipt above 8/6, does not inconvenience the buyer, because the trader usually pays it; nor the shopkeeper, because he raises his price in proportion. From an economic point of view, however, such duties, especially succession duties, are seriously inconvenient. In the French budget for 1886 they amounted to over £27,000,000, or 682,000,000 francs, more than a fifth of the budget.

Section 5. Direct Taxes.

The sources of public revenue we have now studied are not fertile enough to meet all expenses. After all, then, we are compelled to touch the taxpayer directly by a personal and specific tax. Disguise is no longer possible; the government demands from each taxpayer a particular sum; and, if he refuses to pay, the

ordinary methods of legal execution, *i.e.* distraint, are employed against him. Thus, of all classes of taxes this is the most burdensome and vexatious; and governments which have reason to fear the effects of unpopularity avoid this method of obtaining money as long as they possibly can. For example, after the war of 1870, France required to raise an additional sum of £28,000,000 a year; and almost the whole of this amount was levied by means of indirect taxation.

But everything now points to a radical change in men's opinions; and, curiously enough, it is the very desire for popularity that induces present-day governments to reduce indirect taxes, and to seek to obtain the greater part, or, if need be, the whole, of the public revenue from direct taxation. We must explain this singular change of tack.

The object, nowadays, is not so much to find the most productive or the least harassing tax, as to light upon the one which is most in conformity with justice. Nay! there is even an excessive tendency to regard taxation less as a means of furnishing the government with its necessary supplies, than as a mode of setting right the unjust distribution of wealth. In fact, the fiscal standpoint is being abandoned for a social standpoint; and viewed in that light direct taxation is incontestably superior to any other form. As a matter of fact, in virtue of its personal character, it is the only mode of levying money which allows of the apportioning of the imposed burdens to the fortunes of those on whom the tax falls, and which enables the financier to cause the rich to pay more than the poor. No doubt, even with indirect taxes, the rich man will have to bear a heavier burden than the poor man, simply because he consumes more of the taxed article; but the man who has an income of £400 a year does not consume a hundred times more salt, nor even a hundred times more salt or sugar or wine, than the workingman who earns £40 a year, especially if the latter has a numerous family. Of course, the wealthy man may *spend* a hundred times more money on wine, from the fact that he drinks better wine; but our words were, *consumes*

more. Now, duties are proportional, not to the *value* of the articles consumed, but only to the quantity. There is just the same duty on Château-Lafitte as there is on public-house wine; and, however unjust this equality may seem to be, there is no practical way of rectifying it, unless, indeed, the comptrollers of indirect taxes are to taste each sample of wine before they tax it.

Further, from a moral and political point of view, the personal and disagreeable nature of this tax is an advantage; for it is right, nay, it is indispensable, that every citizen of a free country should be compelled to feel directly, and in a manner which he cannot disregard, the consequences and results of all expenditures made by the government, *i.e.* by his chosen representatives. That is the soundest system of political education.

The most natural form of direct taxation is a tax laid in proportion to a man's income. If each citizen's income could be calculated exactly, a simple sum in arithmetic would show the percentage that ought to be levied on that income in order to provide for the public expenses; and then we might seem to have a fiscal system of perfect simplicity and irreproachable justice.

But this principle is far from receiving universal approval, and is disputed by two sets of opponents.

The first class declares that the tax should be laid not on income, but on *capital*. We may accept that statement for a few articles of wealth which yield no income, — such as country mansions, picture-galleries, diamonds, etc., — though these are not of great importance. But the notion is altogether illogical when applied to wealth in general; for, in the case of most classes of wealth, the value of the capital is determined only by the amount of the income. It would, therefore, be much simpler to tax incomes directly. It has been urged that capital, which is wealth already formed, should be taxed in preference to an income which is wealth in process of formation. In our opinion, however, it would be radically unjust to exempt from taxation the gains which are made by a barrister or an opera-singer, even when they cease to possess any capital. Moreover, the valid points in this criticism

could be easily met by taxing incomes derived from capital at a higher rate than incomes proceeding from labor.

The other class of opponents demands that the tax shall be *progressive*, and not proportional; in other words, not only the amount of the tax, but also the proportion of the tax, ought to vary according to respective fortunes. If, say, the proportion is 5 per cent on an income of £400, it should be lowered to 1 per cent on an income of £40, and be raised to 25 per cent on £4000. The reason assigned is, that the privation that every tax causes the taxpayer to suffer is far greater for the poor man than for the rich man. For the man of means who has £4000 a year, a tax of 10 per cent, or a deduction of £400, falls only on that portion of his wealth which is over and above the bare requirements of sustenance; but those very means of subsistence are drawn upon when a tax of 10 per cent, or £4, is levied on the man whose income is a mere £40. The observation is true enough, and may be confirmed by the fact that, usually speaking, social and collective causes contribute more largely to the formation of large than of small fortunes; the former, therefore, may be called upon to pay society more than the latter do; in fact, it is a species of debt which they have to redeem. No objection of principle can be urged against progressive taxation, if its only aim is to establish a proportionality which is more accurate than a purely arithmetical one; moreover, it is already in force in some of the Swiss cantons. But the plan cannot be approved if, as the socialists propose, it is to be used as a levelling instrument by means of which the wealthy classes are to be crushed with taxation, and the classes who live on their own labor completely freed from all burdens. We ought not to aim at an equalization of men's lots; the systematic cutting down of all fortunes which exceed an arbitrarily fixed limit would simultaneously maim all productive activity; and to relieve the wages-earning classes of all share in expenditure arising from the conduct of public affairs would have deplorable political results. For under a system of universal suffrage it is these very classes that really govern; and the first principle

of government is, that those who govern should bear the responsibility of their acts.

Moreover, there are further difficulties as to the application of a general tax on income. It is extremely hard to tell precisely what a man's income is; if we are to abide by the declarations made by the taxpayers, there are strong reasons for thinking that the honest will have to pay for the dishonest, a result that would be scarcely conformable to our idea of justice; if inquiries are to be made as to individual fortunes, the measures necessary for such an investigation of the secrets of private life would be exceedingly harassing, and might prove to be odiously tyrannical. Further, if the State wishes to draw all its revenue from an income tax, it will have to take a large share of each man's fortune. Let us suppose that the collected incomes of all Frenchmen amount to £1,000,000,000; in that case, in order to obtain the £160,000,000 they require, the government and the communes would have to put a tax of 16 per cent on every man's income, — in other words, deduct rather more than a sixth part. But such a levy of £16 out of every hundred would be literally crushing to the man of moderate means. If, as is probable, the poor, and perhaps also the working classes, were exempted from the tax, the share that the well-to-do classes would have to pay would be three or four times higher than the above-mentioned figure.

Notwithstanding these difficulties of application, the income tax is the ideal mode of taxation which we should strive to reach; it would be premature to require that tax to supply the whole of the public revenue, but it should contribute a large and ever-increasing share as compared with the other resources of the treasury. Its partial application would gradually overcome the difficulties we have referred to. The tax is already in operation and works well enough in a large number of countries, especially in England, in Germany, in Switzerland, and in Italy.

In France there is no one general income tax, though that may come soon, but there are *several* taxes which are laid only on certain specified sources of income. We will state the five principal ones.

First. The *land* tax, which is levied on the income yielded by all landed property, whether built on or not; this was fixed according to a general survey of all the lands in France, which took forty years to make and would now need to be done all over again.

Second. The *door and window* tax, which falls especially upon houses. Its curious name arises from the fact that the value of the houses is calculated according to the number of openings in them, though other matters are included in the estimate. After a laborious statistical valuation this tax is to be recast.

Third. A tax on *personal and movable property.* It is this that most closely resembles a general income tax, for it is levied on the general income of the taxpayer; but, instead of being calculated directly on incomes, it is rated according to the house-rent paid, or according to the letting-value for those who live in their own houses. Besides the general tax on incomes, the personal property tax includes a poll tax (ranging between 1*s.* and 4*s.* per head), which falls on every French citizen without regard to proportionality. But the smallness of the sum minimizes its irksomeness.

Fourth. A tax on *trade licenses,* which affects all persons engaged in manufacture or trade of any sort. This again differs from an actual income tax by being estimated not on the profits of the business, but on rather complex factors; *e.g.* the nature of the industry, the population of the town, the value of the premises, etc.

Fifth. A tax on *stocks.* This is of quite recent date, being first imposed after the war of 1870. It is laid on the returns given by all stock save government securities; that is to say, all shares and debentures quoted on the Bourse. The tax is four per cent on shares assigned to specified parties, and double that amount when they are payable to bearer.

By adding to these five direct taxes some others of less importance (such as those on horses and on carriages), we come to a total of some £20,000,000.

We must make a few remarks on the foregoing. Taxes may be divided into *direct taxes at a proportional rate* (*impôts de répartition*) when the amount to be collected is fixed in advance by law and is then divided up amongst the taxpayers, and *taxes at a fixed rate* (*impôts de quotité*) when each man's share is fixed by local commissions, but the total has no limit assigned. Our first three direct taxes are of the proportional kind; the tax on trade licenses is at a fixed rate. It is clear that taxes which are rated on each individual citizen are far more elastic than taxes at a proportional rate, which are almost invariable in their returns. In the budget the tax on stocks comes under the head of indirect taxation, for it is not levied on specified individuals; it falls on the stock itself and not on the capitalist who holds it.

In the above we have confined ourselves to the public revenue of the State. But the revenue of the various communes and departments is also of great importance and reaches the sum of £36,000,000, though sometimes State and local receipts are devoted to the same purpose. The principal sources of this local revenue are the *octrois* (or city tolls), which yield more than £11,000,000 (half of which is for Paris alone) and the "extra pence," (*centimes additionnels*) which give more than £14,000,000. This latter levy is a percentage which is added to the principal of the four direct taxes, and is collected at the same time as they are. The *octrois* need no explanation; latterly they have been sharply attacked by similar arguments to those which have been urged against indirect taxes.

III. The Public Debt.

If most modern governments are unable to meet their ordinary expenses, for a stronger reason, still less are they able to supply the requisite funds for an extraordinary expenditure, say, for a war, or for large public works. Often, then, they are obliged to follow the example of all persons who live above their means, *i.e.* they run into debt. Hence the origin of public debts. There is

not a single civilized country which has not a debt of some size or other; and for a barbarous nation to contract such liabilities is the usual proof that, to use the diplomatic phrase, it has entered the concert of European peoples. In fact, public debts have constantly increased in a greater and more startling degree than public expenses. A century ago the total was practically insignificant; the amount for the whole world is now reckoned to be £6,000,000,000. Among all debt-owing countries France holds the bad pre-eminence, for its debt is more than £1,200,000,000; and next to it come England and Russia.

There are certain exceptions to this; for instance, the enormous development in population and wealth of the United States, and their almost complete exemption from military expenditure, have overfilled their budgets with large surpluses, which they do not know how to dispose of.

In spite of the apparent ease of the task, it is somewhat difficult exactly to calculate the capital of the French public debt. The registered debt (*rentes inscrites*) is divided into 435,000,000 francs' worth of 3 *per cent* stock, which at that rate stand for a nominal capital of 14,500,000,000 francs; 305,000,000 francs of $4\frac{1}{2}$ *per cents*, representing a capital of 6,788,000,000 francs; and 118,000,000 francs of *redeemable* 3 *per cents*, representing a capital of 3,937,000,000 francs. Thus the total comes to 858,000,000 francs of stock, or a capital of rather over 25 milliards; in other words, a little more than £1,000,000,000 sterling. This is the sum that the State acknowledges it owes; it is entered on the stock certificates, and would have to be paid, if ever the government wished to refund the capital, which, we shall see, it is not bound to do. However, the government has by no means received or spent the whole of this money; for it has the curious habit (which we shall presently explain) of always borrowing below par, *i.e.* it asks for a far smaller amount than that for which it confesses itself to be a debtor.

To these 858,000,000 francs of actual stock we must add rather more than 200,000,000 francs of interest, which represent repay-

able capital in the shape of treasury bills, floating debt, funds deposited by savings banks, and securities deposited by officials in charge of public moneys. This capital is even more difficult to estimate than the above; for the interest includes the repayment of such capital under the form of redemption. If we reckon this capital to be rather less than £200,000,000, the entire debt would be 30 milliards of francs, or £1,200,000,000 sterling. The total reached by M. Leroy-Beaulieu is something like £100,000,000 more, but he capitalizes the arrears on civil and army pensions; yet it would be quite as reasonable to capitalize all government salaries, and add that capital to the public debt.

However enormous these figures may seem (and we should be the last to dispute their verity), we must remark that the total income of France is calculated to be about £1,000,000,000, and its entire wealth £8,000,000,000. If a private person, say a manufacturer, earns £1000 a year, and possesses a capital of £8000, we should not think his position at all desperate, or even serious, if he contracted debts to the tune of £1200.

We must now study the origin of these public debts and the way in which they are wiped out.

Section 1. Public Loans.

When a government is in need of money, it behaves like any private person; it applies to capitalists in order to borrow from them the requisite sum, and promises them a certain interest in return. But three characteristic differences distinguish public loans from those effected by private individuals.

Firstly. The State, in common with municipalities, large companies, and all institutions which have recourse to public loans, does not bargain with any capitalist as to the sum it requires and the interest it ought to pay. It offers for sale *stock*, which bear a specified interest and are to be obtained at a price which it fixes beforehand. It is clear that this must harmonize with the actual rate of interest in the market for capital; for, otherwise, no buyers

would be forthcoming. Say the government needs £40,000; then it issues stock at 5 per cent interest, and fixes their price according to the state of its own credit and its hopes of the more or less ready answer of capitalists to its appeal.

Secondly. The State usually borrows by means of *irredeemable stock*, or "perpetual" loans; *i.e.* the capital of the debt is never payable on demand, and the State reserves to itself the right of non-payment if that course seems fitting. At first thoughts we might be inclined to be surprised that lenders would accept such a clause; but a little reflection shows that capitalists who lend to a government do so not for the purpose of having their money repaid, but for the purpose of investment; in other words, in order to obtain a secure income. A certificate of irredeemable stock perfectly fulfils such a condition; and, if at any given moment the capitalist wishes to get his money back, his course is simple enough: he has but to sell his stock on the Bourse.

Thirdly. The State generally borrows *below par*, *i.e.* it acknowledges itself to owe a larger sum than it has actually received. Take a government which could easily borrow at 5 per cent; it might therefore issue 100-franc stock bearing an interest of 5 francs per cent, and offer them for sale at 100 francs, *i.e.* at par. That would be the easiest way; but the French government usually proceeds in another fashion. It prefers to issue 100-franc certificates of stock yielding an interest of only 3 per cent; but it will never dream of trying to sell such certificates for 100 francs, *i.e.* at par; for no lender would come forward under those conditions. No; it offers the stock for 60 francs, which is just the same to the lenders as the previous operation; for 3 francs' interest on 60 francs is an investment at 5 per cent. In fact, this plan will be even better for the lender; though he pays only 60 francs, he receives in exchange a security of the nominal value of 100 francs; and the real value of this stock may reach or approach the nominal figure, if the credit of the government is strengthened. Thus, the English 3 per cents have sometimes been quoted at par, or even at a small premium.

But the method is certainly difficult to explain from the point of view of the State; for it is not only wonderfully complex, but it closely resembles the loans made to young men of family by money-lenders, when the total sum received is not more than half or three-fourths of the nominal amount. Still, as in virtue of the qualifying clause referred to above, the government is not bound to repay the money, it is of little consequence whether it is exaggerated or not. The point of importance is that the interest shall be as low as possible. In fact, its advantages with regard to interest are the only excuse for this method of doing business; for it is probable that the lender may be less severe as to the conditions of the loan if he anticipates that his stock will rise in value. Thus, he might be willing to pay 80 or 85 francs (instead of 60) for this 3 francs per cent stock, which would come to not more than $3\frac{1}{2}$ per cent interest.

Still, whatever arguments may be urged for it, this plan of negotiating loans should be altogether condemned on principle; for it renders all future repayment of the debt either impossible or ruinous for the State, and thus practically prevents any method of conversion.

Passing from the differences between public and private loans, we must observe that the State has the choice of three modes of issuing its stock.

First. It may deal directly with influential banking houses, and obtain from them the necessary money at a fixed price. This is the simplest, and was formerly the almost universal, method.

Second. It may appeal directly to the public by throwing open a public subscription through the whole country on an appointed day. This has been the usual plan adopted in France since the Second Empire, and it possesses certain advantages. The extent of the market thus afforded makes it easier to negotiate loans for large sums, such as the successive loans for 2 and then for 3 milliards of francs which were required for the payment of the war indemnity to Germany. The loan is "classed" immediately; in other words, the stock certificates go straight into the posses-

sion of the persons who are to hold them; whereas bankers are middlemen, who take the stock merely to sell them again at a profit. Finally, when loans are thus publicly issued, they are made to fulfil the somewhat theatrical purpose of manifestations of popular opinion and patriotic feeling. Thus, the prestige of the French government and the credit of the State were greatly raised by the fact that the loan issued after the Franco-German war was subscribed for forty times over. The disadvantage of the method is that in order to achieve startling success from the political point of view, the State usually offers terms which are too favorable to the lenders, and consequently harmful to itself.

Third. The stock may be sold directly on the Bourse, day by day, and according to requirement. This was done some years ago with the loans which were intended to meet the expenses of the great public works in France. From a political aspect this proceeding errs by being partly secret, and the country is not made aware of the expenditure in which it is being involved. The public does not suspect it; hence the fondness which the government shows for this method on certain occasions.

Section 2. On the Extinction of Public Debt.

According to Jefferson, the American statesman, one generation should only have the power of contracting a debt provided that it repays it during its own lifetime, *i.e.* within thirty or forty years. The saying is an admirable one; for it is overwhelmingly unjust that one generation should be able to burden all generations to come with the consequences of its own folly.

Hence, a wise government should always borrow by means of *redeemable* stock; it should undertake to repay the whole of the capital borrowed within a period approximate to that just suggested, or at any rate within a century, at the very outside. If the period is long enough, a very small redemption premium (say $\frac{1}{2}$ per cent of the capital, or even less) will be sufficient entirely to repay the whole capital, so wonderful is the power of compound interest.

Thus, the redemption charge does not add very much to the charges due to interest, and the priceless advantage is obtained of the future being left unshackled. On this plan a certain number of certificates of stock, which are drawn by lot, are repaid yearly. This number is very small at first, but is allowed to increase according as the diminution of the capital and the consequent diminution of the interest allow of the disposal of larger sums.

Unfortunately, most governments, with France as the arch-offender, practise the deplorable custom of borrowing by means of irredeemable stock. In fact, the French public are now so used to the habit, that the attempt made some years ago to introduce redeemable funds failed to succeed, and had to be abandoned. It is somewhat exasperating to note that France, the very State which arrogates to itself the right of borrowing by means of irredeemable stock, refuses to allow the district communes and the departments to resort to such measures, its plea being the interests of the future! In fact, the French departments and municipalities can only borrow by means of debentures which have to be redeemed within a period named by the law authorizing the loan; in other words, they have expressly to undertake to repay the loan, gradually, by means of annuities, within the space of twenty, thirty, or forty years.

Even if a government is accustomed to borrow by irredeemable stock, none the less it can, and ought to, strive to extinguish its debt, or, at any rate, reduce it by degrees. It can do this by two ways: it can reduce the capital of the debt, which is called *redemption;* or it can reduce the interest on the debt, which is called *conversion.* Before we speak of these, we must mention a third method which is sometimes spoken of, *i.e. consolidation.*

Consolidation does not by any means reduce the national debt; it merely transforms a debt which is payable at short notice into a debt which takes the shape of irredeemable stock, the capital of which, therefore, is never payable on demand. Besides the loans which it obtains by issuing irredeemable stock, a method it em-

ploys only on important occasions, the State constantly meets its current expenses by small loans in the form of treasury bills, which are notes payable within four or five years. These bills, and other liabilities of a similar nature, constitute what is called the *floating debt;* and this sometimes grows so large that when the bills fall due the government may find it awkward to meet its engagements. Now, when the State turns this floating debt into a consolidated debt, the process is termed consolidation. It is a financial expedient which is sometimes necessary, but none the less it is a sorry method.

To turn to *redemption;* the term itself is not a happy one, for redemption implies a repayment of the debt. But the operation now under notice is effected merely by buying on the Bourse (or Exchange), at the current rate, as large a quantity of stock as the authorities propose to redeem; the stock certificates are then destroyed, being thrown into the fire, or else cancelled.

The old method was far more complicated. The sum that was to be applied for redemption in each successive year was paid into a special office called the redemption (or Sinking Fund) office. These moneys were certainly employed in the purchase of stock, but the office did not destroy the certificates; on the contrary, it kept them, and applied the resulting interest to the purchase of further stock, the interest on which was turned to the same purpose. It was hoped that through compound interest this system might produce wonderful results. As a matter of fact, the only consequence was the formation of a sort of reserve, which the government appropriated whenever it required it.[1] Moreover, the present plan of cancelling certificates which have been bought has the same results as regards compound interest, and does not lead the government into the same temptation.

It is usually more convenient for the State to adopt the cancelling plan than to reimburse the stock, for that would have to be

[1] This is exactly what used to happen with the English Sinking Fund. See Ricardo's speech of 1823, quoted in his *Letters to Malthus*, p. 160. — J. B.

done at par, *i.e.* a sum would have to be paid equal in amount to the nominal value of the stock; whereas on the Bourse such securities can generally be purchased below par. At present the 3 per cents are at 95, but they have been much below that. When redemption is practised continuously and energetically, it quickly produces very large results, the best example being the extraordinary reduction of the United States debt by the use of this method.

Unfortunately, a prior condition is that the budget should regularly and constantly show a surplus, but in most modern States there is a deficit. In such circumstances it is useless to think of redemption, and it is then simply a sham to resort to partial redemption, as is done in France. What is the object of redeeming with the right hand and borrowing with the left?

We now come to *conversion*. No doubt, it is vexatious for a government to have to abandon all hope of extinguishing the capital of its debt, but the feeling of sorrow need not be a deep one; for, after all, this capital is only a financial fiction, seeing that it is never payable on demand. The only real charge on the public debt is the interest due on it, and that the State cannot avoid paying. Reduction of the interest, then, is as serviceable as reduction of the capital; but how can it be done? We might imagine that stockholders would never willingly accept a reduction of the rate of interest that has been promised them; nor can the State reduce it in its official capacity and against the will of holders of funds, for that would mean a failure to meet its engagements, — in a word, bankruptcy. Is the problem, then, insoluble? On the contrary, it can be easily worked out in the following manner.

Some years ago the French 5 per cents were converted into $4\frac{1}{2}$ per cents; the stock then stood at 107; in other words, was sold on the Bourse at 7 francs premium, having been as high as 117 a few years before that. The government addressed the fundholders after this fashion: "We offer to you the choice between the two following courses: either you must be content with $4\frac{1}{2}$ per cent

interest for the future, or we shall pay back the capital we owe you, at par, *i.e.* at 100 francs." For it must be remembered that though the State is not obliged to pay back the capital of its debts, it has the right to do so, if it wishes. The alternative it offers is, therefore, a sound one. Nor ought we to say that the French government acted harshly in paying back at 100 francs stock which was worth 107 francs; we must not forget that this stock was issued after the Franco-German war at 83 or 84 francs, so that this offer of reimbursement at 100 francs meant that the State paid back 16 or 17 francs more than it received, and that the fundholder got 16 or 17 francs more than he lent. This, of course, premises that the stock had not changed hands during the interval.

Now, which choice shall the fundholder make? If he elects to be bought out, he loses on the present value of his stock, which is worth more than 100 francs; he will probably lose also on the future value, for if the credit of the State is maintained, that stock, even when converted, will most likely be worth more than 100 francs. Now, if he had a chance of finding for the hundred francs to be returned to him as safe an investment and yielding more than $4\frac{1}{2}$ per cent, say in first-class government bonds, in municipal debentures, or in railway shares, he might insist on having his money repaid. But if the minister of finance knows his business properly, he will have proposed this conversion at a time when quotations are high, and it is therefore impossible to invest in sound securities which bring in more than 4 per cent or $4\frac{1}{2}$ per cent at the outside. Thus, on the one hand, the fundholder cannot get from his money a higher rate of interest than is offered him, and on the other hand, reimbursement would cause him loss; he will therefore accept the proposed reduction of interest, though perhaps with a wry face. Though this conversion of the 5 per cents was not made at precisely the best time, yet it was almost unanimously accepted by the stockholders. As at that time the arrears of interest of these 5 per cents amounted to 340,000,000 francs (£13,600,000), the reduction of one-tenth of the interest

on each holding of 100 francs meant an annual saving of 34,000,000 francs (£1,360,000).

Several countries, the United States and England in particular, practise conversion in a methodical and successful manner. Thus the interest England pays on her debt used to be 3 per cent; it is now reduced to $2\frac{3}{4}$ per cent, and is destined to be lowered to $2\frac{1}{2}$ per cent.

The many governments which have reigned in France have made numerous conversions, but most of them have been badly managed, and some of them have actually led to an increase of the capital of the debt without a diminution of the interest. The history and details of these various operations, and all connected questions, may be studied in M. Leroy-Beaulieu's classic treatise *La Science des Finances*.

In the United States conversion has been as successfully employed as redemption. The combined use of these methods has wonderfully reduced the interest on the American national debt. Thus they pay only 3 per cent instead of $8\frac{1}{2}$ per cent, as was the case twenty years ago.

The preceding explanations show that, for any conversion to be effected, the government funds to be operated on must be *quoted at a premium*. If, in our example, the French 5 per cents had been quoted at a discount, say at 95 francs, the State could not possibly have given the stockholders the option of choosing between repayment at par and a reduction of interest. Repayment would have been instantly selected, for by that the holders would have received more than the actual value of their stock. Thus the State would have made a disastrous and egregious blunder, for it would be called upon to pay out £280,000,000 which, by the way, it did not possess. Conversion also requires securities in general to be high, for it is this very height and the impossibility of investing his money for really good interest, that oblige the fundholder to accept the reduced rate of interest which the State offers him.

Thus it is very imprudent for a government, which is offering a

loan for subscription, to issue stock very much below par, say French 3 per cents at 60 or 70 francs; for, as it is extremely difficult for such stocks ever to reach par, the probability of the State being able to resort to conversion is very remote indeed. The greater part of the French national debt is in this form of 3 per cent stock; thus the reckless action of the government will make it extremely difficult for future generations of Frenchmen to reduce the interest on the enormous debt bequeathed to them.

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